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ABSTRACT

A total of 72 papers on nontraditional and interdisciplinary programs are presented in 11 tracks: (1) Assessing Learning Outcomes and Providing Quality in Non-Traditional Degree Programs (8 papers, including "Assessing the Quality of a Non-Traditional Degree Program: A Case Study," by Solomon Deressa and Mary Sue Simmons); (2) Consortial, Cooperative and Collaborative Programs (5 papers, including "Partnerships for Articulation-Successful Models of Cooperation between Two-Year Colleges and a University" by Kay Hill); (3) Educating through Communication Technologies (3 papers, including "Teaching Introductory Humanities on Cross-Campus Televideo," by Arnold Bradford, Donald Frantz and Dee Wayne White); (4) Experiential Learning Assessment and Portfolio Evaluation (6 papers, including "Granting Academic Credit for Life Experience," by Thomas Kowalik); (5) Extending Liberal Learning (5 papers, including "A Cost Effective Graduate Program for the Small Colleges: New Methods and Markets from an Old Model," by A. Patrick Allen); (6) Nontraditional/Interdisciplinary Courses (6 papers, including "Integrating Biology and Literature while Maintaining the Integrity of the Disciplines," by Frank P. Riga and Kenneth R. Barker); (7) Non-traditional/Interdisciplinary Faculty Development (4 papers, including "The Relationship between Faculty Stress and Professorial Style: Do Commitment and Non-Traditional Teaching Methods Lead to Stress?" by Honey W. Nashman and Carol H. Hoare); (8) Non-traditional Undergraduate Programs (13 papers, including "Pace Block XIV: Labor & Economics: An Example of Non-Traditional & Inter-Disciplinary Education for Adults," by Mary-Curtis Browning; (9) Special Programs for Special Students (8 papers, including "Earning Degrees on Weekends," by Helen Dailey); (10) Supports and Deterrents for Non-traditional Students (9 papers, including "The Goodrich Scholarship Program, a Retention Model for Low-Income Students," by Donald C. Dendinger and Joseph Valades); and (11) Teaching Thinking, Learning and/or Writing Skills (5 papers, including "Laptop and Desktop Computers as Resources for Enhancing the Writing Skills of Adult Students," by Peter Balsamo and Pat Kuiken). References are provided with the papers. (KM)

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George Mason University

Proceedings from the Sixth Annual Conference
on
Non-Traditional
and
Interdisciplinary Programs

Edited by

Sally J. Reithlingshoefer
James P. Sanford

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DEDICATION

This volume of Proceedings from George Mason University's sixth annual conference on Non-traditional/Interdisciplinary programs is dedicated to Dr. David J. King, Vice President for Academic Affairs at George Mason University from July, 1982 to January, 1988.

While at George Mason, Dr. King showed unusual interest in continuing education, and in 1986 he appointed a task force which recommended changing the name of the Division to the School of Continuing and Alternative Learning, a change subsequently approved by Dr. King and then the Board of Visitors.

King's interest in the non-traditional/interdisciplinary undergraduate and graduate degree programs was apparent, and he played a strong role in helping to focus the search for a director of the program. King's academic vision encouraged us, as administrators, to pursue courses of action we had never previously considered.

Keenly aware of the university as a whole, King's position was quite clear concerning the integration of non-traditional continuing education endeavors with the more traditional academic programs, and he frequently pointed out to us options we had failed to explore. Speaking in honor of Dr. King, Dr. James J. Fletcher, Associate Provost at George Mason, commented that "He has a remarkable ability to seize quickly the essential elements of a situation and to recognize the unique measures required to bring about a satisfactory resolution." While occasionally we disagreed about the "satisfactory" element of some of his decisions, we have never failed to appreciate the force of his personality and his level of personal commitment to and involvement in those decisions.

As President George W. Johnson noted, "The hallmarks he [King] left here will be more indelible than the mere bricks of any building." Dr. David King has set an example of leadership for us which we will never forget.

Sally J. Reithlingshoefer

Sally J. Reithlingshoefer
Associate Dean
School of Continuing and
Alternative Learning

April, 1988

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ASSESSING LEARNING OUTCOMES AND PROVIDING QUALITY IN NON-TRADITIONAL DEGREE PROGRAMS

by Barbara Cherem

Spring Arbor College (SAC) is a small Christian liberal arts college in southeastern Michigan. SAC began an adult degree-completion program in 1982 in the Management of Human Resources (MHR).

The MHR program has grown quickly from 64 students in 1982-83 at one site to 309 students in 1986-87 at five sites. Such rapid growth demanded careful attention to quality control measures. This paper will summarize SAC's experience in the assessment of learning outcomes and the development of an evaluation system. Such a system has begun a data base for monitoring program quality in the MHR program.

MHR Program-Setting

A convenient delivery system and the ability to complete their B.A. degree in a year are attractions of the MHR program to adult students. While the formation of a community study group and the presence of a project thesis are the attractions of MHR to college administration.

Typically, classes meet as a single group one evening a week for an entire year. This MHR group remains together for 10 modules (units of study), 60% of which is taught by a major professor. The major professor unites and sets the tone for the group. He/she also counsels students through any difficulties they encounter over the year of group study.

An additional support person, the academic coordinator, liaisons to campus for students and gives administrative support to the group. The academic coordinator also assists students in a project thesis.

The project thesis is a five-credit applied research project, which demonstrates growth in the student's problem-solving and writing abilities. The project process is similar to an M.A. thesis, but without its depth and breadth, and with many more resources to support the student, both written materials and personnel.

The project thesis is a 35-70 page written presentation on a work-related problem which students have researched, collected original data, implemented a change or evaluated alternatives for change, and reached conclusions and recommendations. As they spend the year in the curriculum, they are simultaneously working on this project problem. Its completion is required for graduation.

The final aspect of the program attractive to students is the portfolio component. The portfolio is the most unique aspect of the program. Each MHR student assembles a five-sectioned notebook called a portfolio. It has two sections which together can generate up to a year of credit (30 hours). These two sections are professional-technical and life-learning experience petition papers.

Barbara Cherem, Director of Evaluation and Research for MHR, Spring Arbor College, Spring Arbor, Michigan 49283

Having some background in this rapid growth off-campus program is helpful to understanding Spring Arbor College's needs in assessing outcomes and providing quality. The need to integrate such a program to the campus mission is especially critical. We began this linkage through examining SAC's Ideal graduate statements.

Linkage to College Mission

The evaluation system of SAC's adult degree completion program is linked to the Spring Arbor College Ideal graduate statements, outcome statements originally designed for SAC on-campus students. These outcomes specify general outcomes such as problem-solving, communicating and valuing, general outcomes that are central to SAC's mission statement. (See Attachment 1.)

The achievement of these ideal outcomes has been assessed through a variety of measures ranging from self-description to the ACT-COMP (entry to exit). This paper will summarize the various measures and the ways in which they have informed the improvements made in SAC's management program. The evolution from surveys to multiple measures to externally validated instruments and faculty assessments, all valid measures of student growth, will be discussed. Attachments include actual outcome results to enable other colleges just beginning their outcome measurement effort to see SAC's.

Assessment measures have been set in place for 10 of the 13 outcome statements comprising the ideal SAC graduate statement. Because physical fitness and faith development are difficult to address or measure, this paper will only discuss the ten outcomes for all SAC students, and the more particularized outcomes for our MHR business graduates.

By 1985, Spring Arbor College had three years experience with adults completing the college's adult-degree completion program in MHR. It was at this point that questions of outcomes were raised. Was our five-part evaluation system, which tapped students' perception of program quality, sufficient to instruct and control quality in this high-growth program?

Beyond knowing that they had passed a writing evaluation, had 62 transferable college credits, and were employed and over 25 years of age, we knew little about our MHR students at entry. Rather than be stymied by beginning data collection only after we found the perfect tools, we decided to begin surveying MHR students with the Cooperative Institutional Research Program (CIRP) already used with SAC on-campus students. From Alexander Astin of UCLA, the CIRP is used annually by 560 institutions and in 1987 sampled 209,000 students; it promised some good norm-referenced data.

Existent Surveys

We began using CIRP for selected MHR groups in the fall of 1986. It provided interesting data on motivation for entry, attitudes and values, demographic material, and personal information.

While our marketing people appreciated the motivational data, the administration was intrigued by the other information. A comparison of MHR students to on-campus students was revealing. For instance, our adult off-campus students were like our on-campus students in that they were first in their family to complete a B.A. (92%). They were also similar in some other respects. MHR males held traditional values and attitudes similar to younger on-campus males and females. However, MHR females held radically different values and attitudes. Such findings began arousing interest and curiosity sufficient to begin a greater commitment to evaluation of outcomes.

Self-Designed Perception Surveys

Simultaneous to our administering CIRP to the selected groups, I began to overhaul our five-part evaluation system which tapped students' perceptions of program quality with five evaluations administered over their year of study with us. Questions were added to the mid-point evaluation and also asked at year-end exit. Growth questions were added to the exit evaluation. More explicit questions concerning instructional quality, curriculum worth, and support office services were also asked. Particularly valuable were questions added involving growth in skills, as well as areas of personal and professional growth. These crude surveys of program quality and student growth were useful to document students' perceptions of what quality and growth had occurred over their year of study. Such probing led to a search for additional measures of these same growth areas.

Employer surveys and alumni surveys were constructed to measure the same areas of growth as our exit evaluation, but from differing perspectives. Each student's work-related project thesis had an on-site employer as overseer. This site contact provided an opportunity for measurement of the MHR student's growth from the employer's perspective. An employer who had worked with the student employee on the work-related project thesis was in a position to measure that student's growth in the practical work setting. For example, in answer to the question was there transference of what had occurred in the academic program to the worksite, employers responded (14%) that such growth across many areas had occurred (see Attachment 2). Our total data base to date is small (55), but the results and employer comments have been very instructive.

We then solicited MHR alumni on these same measures. In January 1987, one-third (108) of alumni responded. Surveys of employees and alumni provided comparative perceptions. Additionally, all exiting MHR students were asked these same questions. Such perceptual data began to reveal consistency of response and areas of strength. (The results of the January 1987 survey are in Attachment 3.) A comparison of selected growth outcomes from students at exit, employer perceptions, and alumni is displayed in Attachment 4.

By the winter of 1987, six months after our initial CIRP surveys, we had aroused enough interest and provided sufficient informative data that a more serious commitment to evaluation was justified. Our descriptive data was a solid beginning, but further questions of quality remained. Externally validated measures were also needed. The lack of external measures focused on actual performances formed a gap in our now evolving evaluation system. As of July 1987, a half-time position was created for research and evaluation in MHR.

External Measures

The selection of the ACT-COMP short-form objective test served our need for an external, validated test instrument. It is quick, inexpensive, and valid. Video and audio components show 15 simulations which are relevant to contemporary adults. As American College Testing claims, the test provides activities which require "application of general knowledge and skills to problems and issues commonly confronted by adults."

In the fall of 1987, via use of this instrument, we initiated this measurement of six liberal arts areas, that is, the pervasive areas not tied to a single module. Thirty-eight adults agreed to participate in the 2-1/2 hour ACT-COMP test at their MHR entry. They will be tested one year from entry, in the fall of 1988, at their exit. Hopefully, this will be a start at measuring the process areas--communicating, solving problems, and clarifying values--and the content areas--functioning within social institutions, using science and technology, and using the arts--which we feel important to a Christian liberal arts college. For example, if there is growth over the year of study in "using science and technology," not an area of program focus, it would stimulate us to probe much further.

The students' entry-level results proved interesting. The age break-out confirmed our belief that older people bring valuable experiential learning with them. We may grant up to 30 hours of portfolio credit, which includes both a credit assessment of life-learning papers and professional-technical evaluations. For this component to be viable, students must have some life experience on which to draw. The ACT-COMP results by age reflected how powerful these years were in raising average scores in all six sub-areas of measurement. Older MHR students, those over 30 years, scored significantly higher in all six areas than the younger MHR participants.

Another area now receiving attention is our need for an externally validated instrument measuring the major in business itself. The external test of the major in business will be ready in November 1988. We will again be utilizing an American College Testing measure. Either of the ACT's proficiency exams which focus on organizational behavior or personnel administration should prove an effective tool.

Evaluation by Faculty

Despite the use of these many and varied instruments, our major professor and academic coordinator, because they work with students for a year, are our most valuable sources of information on student growth.

Though there are module summary papers which assess each student's module learning, the major cumulative assessment of the program results from the project thesis. The project thesis itself is the single most valuable tool in assessing student growth in such areas as problem-solving and writing skills; this thesis is truly a capstone activity. We have grown in our appreciation of it as a quality control measure of our graduates' learning.

Much of their learning in problem solving, writing, statistics and group dynamics is applied in this project thesis. Required for graduation, it summarizes their year of study. Both their major professor and their academic coordinator have supported them throughout this project process chapter-by-chapter and both jointly grade the final thesis.

Summary

The evaluation system at Spring Arbor College's Management of Human Resources program is an evolving one. It started with strictly perceptual and descriptive data and has grown to include multiple measures of selected outcomes and externally validated instruments. We have several entry-to-exit measures, some of which are longitudinal.

As we move beyond mere surveys to an actual evaluation system, we have benefited in both anticipated and unanticipated ways from the immense quantity of data gathered. We anticipated its usefulness in monitoring and driving program quality. It drove some substantive curriculum changes resulting in greater coherence. We knew its usefulness to monitoring and driving program quality and to educating upper level administrators about the program's quality. We even anticipated its usefulness in our North Central ten-year review. The surprising results which evolved came when we assembled all of our data into a 13-section MHR Data Book. (Attachments 5, 6 and 7 summarize much of the Data Book sections.) All five geographic centers, as well as Spring Arbor College's President, Dean and Executive Director, now have and use their Data Book copies. We were unaware of just how useful the book would become in marketing to individual students and in marketing to other colleges interested in purchase of the program.

Of the major concerns to all organizations, the biggest one currently is responding to change. Creating an evaluation system has been key to program quality in our high-growth program. Sixty-four students entered MHR in 1982-83. Over 300 students will enter MHR this year. Handling rapid change and growth is facilitated by systems which provide an informing data base. Evaluation systems provide crucial feedback of such data bases.

ATTACHMENT 1

Spring Arbor College Ideal Graduate Outcomes

1. Is prepared to be a continuing student, capable of self knowledge.
2. Is adequately prepared in one or more disciplines to undertake further graduate training.
3. To fill a productive and rewarding role in a contemporary world.
4. To sort out relevant knowledge, make wise decisions, and think divergently, critically, and productively.
5. Has developed an understanding of heritage (Cultural, American, Judeo-Christian).
6. Has discovered the crux of contemporary social and moral issues.
7. Has acquired tools of researching.
8. Has learned the value of physical fitness as a part of total fitness, and accepts personal responsibility for developing and maintaining optimal health and wellness.
9. Has gone through the process of self confrontation. As a result of this confrontation, the graduate will understand more fully personal motivations, aspirations, capabilites, and goals in life.
10. Has improved skills of communication.
11. Has encountered the Christian faith...in this encounter the graduate will have formed a meaningful relationship with Jesus Christ and with his/her fellow man.
12. Has grasped a portion of its (Christian faith) demands for our day; and has discovered the perspective that life in Christ can give to all learning, vocation, and life itself.
13. Is a person of compassion who cherishes community among all people, and expresses compassion by critically participating in the world. The student is sensitive to need, responsive to opportunity, and wise in participation.

ATTACHMENT 2

Summary of 1986 - 1987 Surveys*

MHR Site Contact Survey **MHR**

Some time ago, an employee of your company completed a Management of Human Resources (MHR) program at Spring Arbor College. As part of this program, the employee wrote a project thesis which attempted to solve a work-site problem. You were the site contact for this project thesis. We welcome your comments on the value of the project to your organization and the value of MHR to your employee's growth. Your response to these questions will help us to maintain and improve the real-world quality of our MHR program.

1	Strongly Agree
2	Agree
3	Undecided
4	Disagree
5	Strongly Disagree
N/A	Not Applicable

Project Thesis Title: ______________________

Employee/Student's Name: ______________________

							** $\bar{x}$
1. The project thesis was useful to our organization.	1	2	3	4	5	N/A	1.7
2. We have implemented some of the actions suggested by the project thesis.	1	2	3	4	5	N/A	2.1
3. The process utilized in the project thesis was of benefit to the employee's general problem-solving abilities.	1	2	3	4	5	N/A	1.7
4. As a result of this employee having taken the MHR program, the following skill areas have improved:							
a) written communication skills	1	2	3	4	5	N/A	1.7
b) oral communication skills	1	2	3	4	5	N/A	2.0
c) problem-solving skills	1	2	3	4	5	N/A	2.0
d) conflict management skills	1	2	3	4	5	N/A	2.2
e) group process skills	1	2	3	4	5	N/A	2.0
f) management or supervising skills	1	2	3	4	5	N/A	2.1
g) interpersonal skills	1	2	3	4	5	N/A	1.8
5. The employee can better employ systems thinking.	1	2	3	4	5	N/A	1.8
6. The employee can write measurable objectives.	1	2	3	4	5	N/A	1.8
7. The employee can more effectively research and collect relevant data.	1	2	3	4	5	N/A	1.6
8. The employee grew personally as a result of the MHR program.	1	2	3	4	5	N/A	1.6
9. The employee grew professionally as a result of the MHR program.	1	2	3	4	5	N/A	1.6
10. This person has become a more valuable employee for our company due to his/her MHR studies.	1	2	3	4	5	N/A	1.8

Other Comments:

____

____

____

Signature, ______________________

Position, ______________________

* Lower means are best scores ** Means were rounded to nearest tenth place N = 55

ATTACHMENT 3

MHR Alumni Survey Results (1/87)*

Please mark the level to which you agree or disagree with the following areas:

	Strongly Argee	Agree	Undecided	Disagree	Strongly Disagree	Not Applicable	Total $\bar{X}$
1. The project thesis was useful to my organization.	1	2	3	4	5	N/A	2.0
2. Some of the actions suggested by the project thesis have been implemented.	1	2	3	4	5	N/A	2.0
3. The process utilized in the project thesis was of benefit to my general problem solving abilities.	1	2	3	4	5	N/A	1.8
4. As a result of my having taken the MHR Program, the following skill areas have improved:							
A. Written communication skills	1	2	3	4	5	N/A	1.6
B. Oral communication skills	1	2	3	4	5	N/A	1.9
C. Problem-solving skills	1	2	3	4	5	N/A	1.8
D. Conflict management skills	1	2	3	4	5	N/A	1.8
E. Group process skills	1	2	3	4	5	N/A	1.7
F. Management or supervising skills	1	2	3	4	5	N/A	1.8
G. Interpersonal skills	1	2	3	4	5	N/A	1.8
5. I can better employ systems thinking.	1	2	3	4	5	N/A	1.9
6. I can write measurable objectives.	1	2	3	4	5	N/A	1.7
7. I can more effectively research and collect relevant data.	1	2	3	4	5	N/A	1.7
8. I grew personally as a result of the MHR Program.	1	2	3	4	5	N/A	1.4
9. I grew professionally as a result of the MHR Program.	1	2	3	4	5	N/A	1.9
10. I have become a more valuable employee for my company due to my MHR studies.	1	2	3	4	5	N/A	1.7

Additional Comments: refer to attached sheets

Students now working on master's level at:

University of Michigan	Public Administration
Central Michigan	MSA Program
Western Michigan	Public Administration/MPA Program
Eastern Michigan	Education Leadership/Adm. in Adult & Comm. Ed.
Saginaw Valley State College	Social Services
Michigan State University	Adult and Continuing Education
U of FCA	School of MTG Banking
T.M. Cooley Law School	
Nazareth	Master of Arts in Management

Thank you for your time and cooperation in this matter. Your input is greatly appreciated.

Please use the enclosed envelope to return your completed survey to Spring Arbor College. We would appreciate a response as soon as possible. Thank you!

* N = 108

ATTACHMENT 4

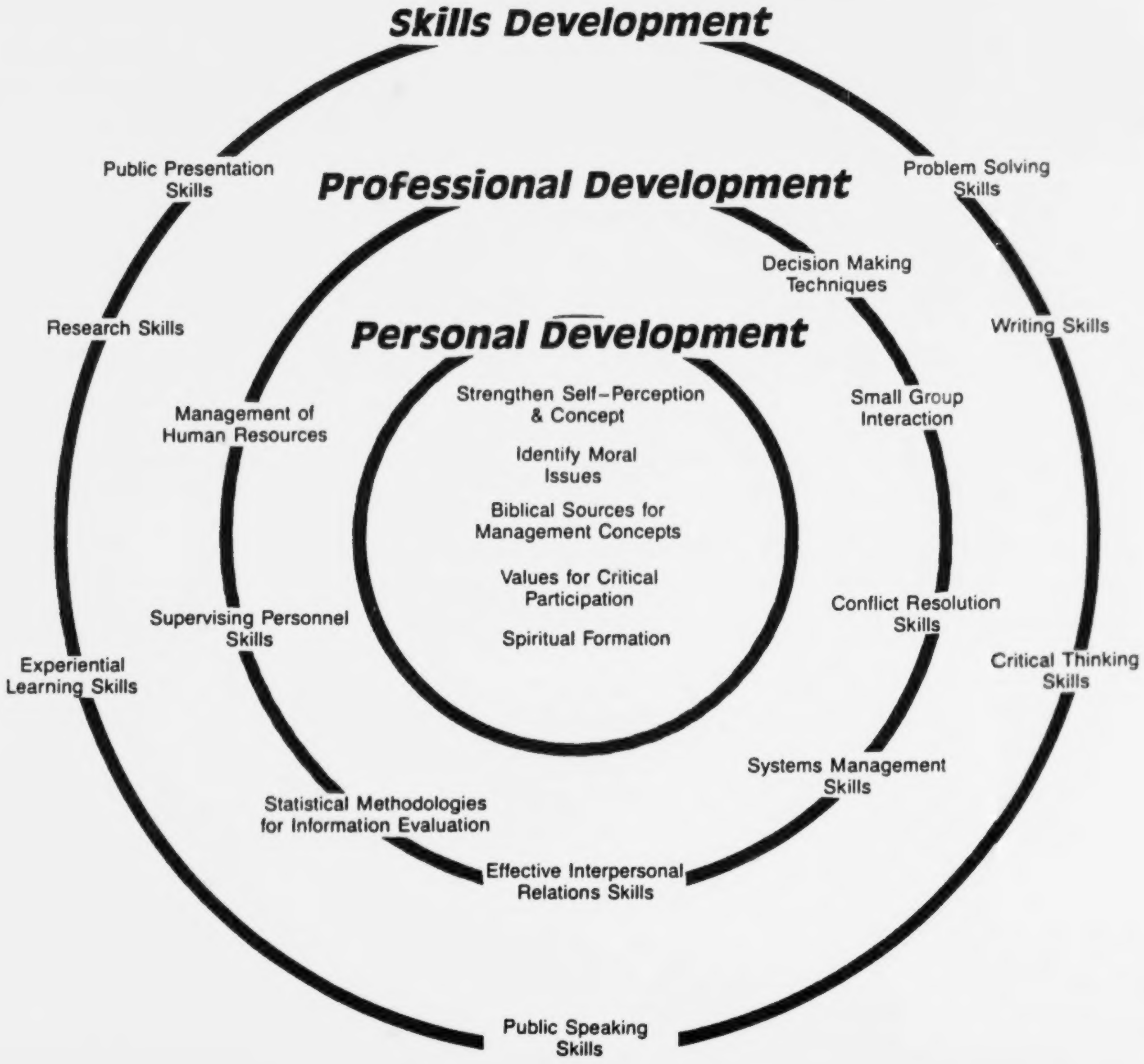
A Comparison of MHR Impact from 3 Surveys
Survey Averages*

	Number	Student at Curriculum Completion	Number	Alumni (1-4 yrs. Completed)	Number	Site Contact
The project thesis was useful to organization	91	2.2	108	2.0	54	1.71
Problem-solving skills improved	74	2.0	108	1.8	55	1.97
Communication skills improved	72	1.9	108	1.9 oral 1.6 written	55	2.0 oral 1.7 written
Self-esteem improved	73	2.0				
Grew personally as a result of the program			108	1.4	54	1.6

* Lower averages (1) indicate strong agreement with statement. A 5 point Likert scale was used.

LEARNING OUTCOMES OF THE MHR CURRICULUM

ATTACHMENT 5



Skills Development

Public Presentation Skills

Research Skills

Experiential Learning Skills

Public Speaking Skills

Critical Thinking Skills

Writing Skills

Problem Solving Skills

Professional Development

Management of Human Resources

Supervising Personnel Skills

Statistical Methodologies for Information Evaluation

Effective Interpersonal Relations Skills

Systems Management Skills

Conflict Resolution Skills

Small Group Interaction

Decision Making Techniques

Personal Development

Strengthen Self-Perception & Concept

Identify Moral Issues

Biblical Sources for Management Concepts

Values for Critical Participation

Spiritual Formation

Evaluation of Learning Outcomes of MHR

	Learning Style Inventory Module 2	Performances, Chapter 2 of Project Thesis (Library Research)	Demonstration, Class Feedback Forms, Project (Wks 25, 48)	Chapter 4, 5 & 6 of Project Thesis: Original Research & Design	Life Learning Petition Success Rate	Evaluation of Module 4 (Core 300)	Summary Paper: Module 4 - Biblical (Core 300)	LEAD	Summary Paper: Module 9 - Values (Core 400)	All Summary Paper Evaluation	Final Evaluation (Self-Perception) (Wks 47/48)	Project Thesis	ACT-COMP	Site Contact Survey	Alumni Survey	Test of Management Major (1988 - 89)
I. Skills Development *																
Public Presentation			X													
Research		X		X												
Experiential Learning	X				X											
Public Speaking			X													
Critical Thinking										X		X	X			
Writing										X		X	X			
Problem-Solving												X	X			
II. Professional Development																
Management of Human Resources														X	X	--
Supervising Personnel								X						X	X	--
Statistical Methods for Information Evaluation								X			X	X		X	X	
Effective Interpersonal											X			X	X	
Systems Management											X			X	X	--
Conflict Resolution											X			X	X	
Small Group Interaction														X	X	
Decision-Making											X	X				--
III. Personal Development																
Self-Esteem											X					
Identify Moral Issues							X		X							
Biblical Sources for Management Concepts						X	X									
Values for Critical Participation									X							
Spiritual Formation						X										

* These areas are all addressed throughout MHR activities, the success of theses activities is evaluated through the means listed on horizontal axis.

ATTACHMENT 7

MHR Data Book

The MHR data book overviews MHR quality by displaying descriptive information collected over 1985 through 1987. The organizational divisions are the following.

- I. MHR Program Profiles
  - A. June, 1987 - an MHR Overview
  - B. July, 1986 - an MHR Overview
  - C. Cooperative Institutional Research Program (CIRP) - Selected Information from 5 MHR groups - reasons for entry etc.
- II. Evaluation Measures
  - A. Overview
    - 1. Seven measures highlighted
    - 2. Matrix of SAC Ideal Graduate Goals --- program activities and measures
  - B. Learning Style Inventory (Kolb)
  - C. MHR Group Evaluation System
    - 1. Selected Instructor Evaluation Composites - Nov. 1985
    - 2. Administrative Procedures - Nov. 1985
    - 3. Project Thesis Evaluation - Nov. 1985
    - 4. Biblical Perspectives - Core 300, Aug. 1987
  - D. Program Evaluation - Growth in MHR (question III C by MHR Students on week 48 evaluation)
  - E. Alumni Surveys
    - 1. MHR Survey
    - 2. Institutional Development Survey - SAC
  - F. Testimonials - Alumni Survey
  - G. Site Contact (Employer) Survey
  - H. Project Thesis Measures
    - 1. The Project Thesis' Importance - Comparison of Perceptions on Project Thesis from three surveys:
      - a. Recent graduates's survey
      - b. Alumni survey (1 - 3 yrs. completed)
      - c. Site contact survey
    - 2. Student "Reflections" Chapter from Project Thesis
  - I. Venture - Promotions/Graduate School Notifications
- III. An MHR Time Study

ASSESSING THE QUALITY OF A NON-TRADITIONAL DEGREE PROGRAM: A CASE STUDY

Solomon Deressa, Mary Sue Simmons

The assessment of quality in non-traditional education has focused, for the most part, on program evaluation, prior learning assessment and the evaluation of student projects and of teaching and advising. By holding itself accountable through these processes, non-traditional higher education has achieved acceptability even with highly traditional university authorities. Acceptability and changing times have now added a new twist: students as well as faculty want to see special recognition accorded to individual degree programs. In effect, they want to attach such traditional qualifiers as with honors, cum laude, with distinction to the degrees awarded a few deserving students.

To some extent, this desire to distinguish between the adequate, the good and the excellent may simply be acknowledging the social, economic and political changes within which higher education functions and evolves. Like it or not, the sixties and seventies are gone and the eighties are drawing to a close. It may also mark a shift of emphasis from learning-to-learn to learning-to-achieve. It certainly acknowledges the full acceptance of the prodigal child, non-traditional education, back into the fold. It may also be a way of recognizing the simple cultural fact that individuals do compete even if the competition is only against a set of standards.

The case that is presented in this paper is that of the Program for Individualized Learning (PIL) at the University of Minnesota. PIL was, until two years ago, known as University Without Walls (UWW). That the University saw changing the name of the program as an urgent enough need to devote to it a substantial amount of university community time, is significant. However that significance is interpreted, the fact that UWW (rebaptised PIL) is the only one of several experimental programs that were housed in University College in the seventies to not only survive but thrive into the late eighties is a measure of the program's ability to adapt to changing conditions while keeping its integrity and basic philosophy.

One of the ways in which PIL has responded to the challenge of distinguishing between a degree and a degree is to opt for graduation with honors rather than distinguishing between a degree program and an honors degree program. The former simply acknowledges work that has been done at a certain level; the latter sets out to provide special learning opportunities for students designated specially able. PIL assumes that the vast majority of its students are not only specially able, but also

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already in a program that is comparable to honors programs in other colleges and programs at the University of Minnesota.

Graduating with honors is a firmly established process in most colleges at the University of Minnesota. Traditional programs determine student eligibility for honors by examining a combination of grade point average, course level, honors seminars and, in some cases, residency requirements. In a non-traditional program such as PIL at the University of Minnesota, some students complete degree programs without ever taking a course. In addition, many adult learners in the program have coursework from previous college work with grades below B. So, an interesting problem arises in attempting to make graduation with honors an opportunity in PIL. This paper will examine the context, as well as the specific criteria for honors were developed so that both PIL and the University can recognize extraordinary student achievement.

PIL serves self-directed students with clear educational goals who need flexibility in the design and implementation of an individualized B.A. or B.S. degree program.

Students in PIL were already performing at a high level and the need to distinguish between students who perform at exceptionally high levels and those who do good work arose as a preliminary consideration to honors. The desire to award honors came persistently from University faculty who sometimes took it a step further and asked if there was a way to recommend a graduate degree when the candidate was reviewed for the awarding of the baccalaureate degree. Faculty reviewers often stated that the contents of the student's graduation dossier represented graduate level work. So, faculty who worked with PIL students and who served on the governing body for PIL (known as the Policy Council) entered the arena of interest in awarding a degree with honors to PIL students.

Discussion among PIL staff members led to the formation of a task force on honors chaired by a PIL academic adviser and constituted of three faculty members (from physics, English and educational psychology) and one PIL student. Twenty-five percent of PIL students were surveyed at random. Questions asked were:

1. Would you support the offering of degrees with distinction or with honors to graduate from PIL?

2. Would you be willing to do not more work but work at a higher level which might lengthen the time you take to earn your degree in order to graduate with honors?

3. If so, what would you expect to gain by it?

Ninety-six percent of those surveyed responded by saying they were very much interested in the opportunity to earn a degree with honors from the University of Minnesota. They also said they were willing to be sent back to the board until the level of their work was honors level. They indicated the belief that the qualifier "with distinction" of "with honors" attached to their degrees would give them an edge when they applied to graduate schools. If they did not intend to go to graduate school, then the degree with honors would impress perspective employers or for those employed, lead to promotions and raises more easily. Four percent were interested more in just graduating and were not willing to either put in extra time or extra effort.

After a series of discussions, staff members who were opposed to the idea of honors or distinction joined in the consensus that allowed students the opportunity to pursue honors. The opposition to honors was based on the following:

1. Since the PIL process, by its very nature, offered honors-like opporunities, additional requirements might further complicate a process already complex enough.
2. The philosophical basis of PIL was to encourage passionate learning and instill habits conducive to life-long learning.
3. Honors seemed elitist. In a program rooted in egalitarianism, elitism had little support.
4. There was concern (and there is today, though at a lower level) that honors "designates those not receiving honors as second class."

The above arguments become understandable if we recall that PIL was until two years ago UWW. UWW grew out of the philosophical traditions of the 60's where the move was away from the basics and competition toward nurturing the student's learning needs at whatever level they occurred.

Thus in a sense, the very emergence of the question of honors represents a shift in the philosophical position of the program. This shift in turn reflects the University's current emphasis on reducing the number of undergraduate students, higher funding for graduate research, raising the standards of admission to the University and competing with institutions of "high repute" both from the point of view of the image projected and the rigor imposed on students.

It is worth noting that this shift in PIL is not totally the consequence of the University's Commitment to Focus but rather the continuation of a shift from process to content that started in PIL in 1980.

It was in the 1980's that content came to take precedence over process and such questions as the acceptability of community college courses and the use of prior learning for a baccalaureate degree all came to the surface. As a survey of student degree plans (individualized curricula) shows, almost year by year, the number of pages in the plans has grown from an average of 8 pages to 25 pages. Also, where initially the content requirements were intended as a basis for reflection, now content has become so important that reflection is almost an excuse for doing content.

Although the larger changes at the University of Minnesota are not the direct result of anything that occured in PIL, it is significant that what the University is now working toward is in large measure what UWW used to do. The original UWW and now PIL have long since required students to complete a major project, write reflective graduation essays and develop critical thinking skills. These have taken hold in the larger University in very recent times. Thus, whereas the larger University has dragged PIL in its wake to a very great extent, the drag is in some ways in the direction in which PIL was already going.

It is this context, a discussion of honors in PIL has taken place. The decision was made not to have an honors program but a program with the possibility of honors graduation. Our students do special work anyway. Once consensus was reached on staff and in the honors task force that the questions became on what basis to distinguish between work that is honors level and work which is not. From the point of view of PIL academic advisers and University faculty, the question was essentially theoretical in the worst sense. Most felt they always know outstanding work when they come across it. From the point of view of the task force that was all well and good but not enough. Students are entitled to criteria for honors determination that are easily recognized; not only after the fact but also in advance so that they can serve as guidelines for aspiring to honors graduation.

All colleges in the University of Minnesota system use the students' GPA for admissions into the honors sequence as well as for graduation with honors. The majority also require that a given percent of credits be at the 3000 and 5000 levels. The College of Liberal Arts also considers approved 8000-level courses open to undergraduates, one of several "honors opportunities." The consistent principle is to allow students to attempt work beyond the usual standards for undergraduate work in the major, while insuring that their achievement meets high standards in other areas also.

However, these traditional criteria do not fit well into the PIL process. A large number of our students graduate with very few course credits. Letter grades are very rarely used in evaluating independent research projects. Instead, narrative evaluations are used. In addition, some of the most brilliant PIL students come in with transfer credits from as far back as a decade earlier, and those grades don't always reflect honors level work. The obvious question becomes, is PIL going to graduate students with honors on the basis of work done in the past or is it going to assess primarily work done after the student's entry into the program? Also, 5000 and 8000-level courses that are held in such high esteem by the younger students of other colleges are often taken for granted by PIL students. In addition, independent study projects done through the program do not carry numerical level designation.

Thus the crucial question becomes: How to define honors in a manner that is acceptable to the totality of the University, make it a status that is truly earned, easy to recognize and in keeping with the philosophical orientation of a program which still aspires to teaching students to become life-long learners?

The task force on honors in PIL developed a reasoned set of requirements for honors eligibility and a set of criteria to be addressed in order to achieve graduation with honors. The task force stated in the preamble to the requirements that processes in PIL already resembled honors opportunities in other colleges. These processes include: taking initiative for their learning, developing critical and creative thinking abilities, writing well, designing independent research projects, balancing theoretical learning with practical application of the learning acquired, discerning the inter-connectedness of all knowledge, analysis and synthesis of information and reflectively integrating their academic education into their personal and professional lives. Consequently, the task force members felt no pressing need to develop new honors opportunities in PIL.

The report of the honors task force now under discussion and review contains the following information about graduating with honors in PIL:

Requirements:

I. Eligibility:

No more than three of the breadth criteria can be met with projects or courses at the introductory or 1000 level. In the area of concentration, 1000 level courses can be used only as preparation for upper level work and not to fulfill credit count or volume requirements.

To graduate with honors, 60% of all work done while the student is in PIL must be at A level. Where the work is a PIL project lending to a narrative evaluation rather than a letter grade, the evaluator will designate the outcome of the project as *outstanding*, *superior* or *A-level* work. Community faculty evaluators who may not have the academic frame of reference for such a designation can compare the student's work to work done by professionals in the field. PIL academic advisers who do not write formal evaluations will compare the honors candidates work to work done by other students in the program.

II. Nomination and Recommendation

1. A student may be nominated for honors graduation by his or her academic adviser, by the second reader of the student's graduation dossier (another academic adviser), by the PIL faculty director, by the student's area specialist, by a project evaluator who is a member of the University faculty.

2. The student can nominate herself or himself for honors graduation.

3. The preliminary review committee, augmented by the PIL program director, must approve the forwarding of the nomination to the graduation committee.

4. Three out of five graduation committee members have to vote to recommend the degree candidate for honors graduation.

III. Criteria:

Writing and communication ability:

* The major project and statement of readiness should demonstrate excellent writing ability appropriate for the discipline; presentations in other media should be similarly strong.

Values and cultural awareness:

* All work presented should demonstrate awareness of one's own values and assumptions, and ability to give fair hearing to those of other people and other cultures.

Evidence of growth:

* Projects should demonstrate growth in conceptual or creative ability.

Distinction in scope and quality:

We recognize that each project will define its own standards, but in general, these criteria, some of which will apply in each case, define the distinctive scope, seriousness and originality that define honors work.

* The major project, support area studies, and statement of readiness should be clearly original in the opinion of the faculty involved.
* The major project, support area studies, and statement of readiness should define a project whose scope and significance show initiative well beyond basic PIL requirements.
* The major project, support area studies, and statement of readiness demonstrate unusual integration or synthesis.

We believe the above set of guidelines should be viewed as only one set of possibilities for graduation with honors from a non-traditional program. Because we value the developmental approach to adult education, we must continue to take care in watching that the individual learner's path to knowledge and awareness is not blocked or wrongly skewed because the quest for honors becomes the guiding focus to the learning pursued. As the process is put into place so that deserving students can graduate with honors, we hope that the integrity of all student learning in PIL remains uncompromised and valued by all concerned.

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ASSESSING QUALITY IN A NONTRADITIONAL DEGREE PROGRAM--FIFTEEN YEARS LATER

Oscar L. Dorsey
Michael J. Pierson

Quality in any degree program must be periodically monitored, but in a nontraditional program it must be a continual process. The standards used for traditional programs are: specified training for faculty, minimum time exposure for students, prescribed scope and sequence of curriculum, minimum length of residential campus experience, and appropriate laboratory and library equipment and space. A nontraditional program must meet these standards and more, in order to survive with credibility. In addition to the traditional standards and methodology, nontraditional program quality must be reviewed by feedback from clients in longitudinal studies, performance in graduate study, and satisfaction of employers with client performance. In general, most institutions have developed nontraditional programs that are academically sound (Andrews, 1978, p. 16).

Fifteen years ago Southwest Texas State University began developing degree programs to meet the need of a growing population of students--that of the working adult. In order to serve these students their specific needs were identified and studied. It become apparent that this student body actually demanded higher quality academic work but required a different sequence in matriculation, a new delivery system, and modification of credit determination and accumulation. The university devised the new degrees based on off-campus and week-end delivery of courses, granting college credit for valid extrainstitutional experience, credit for testing, modification of curriculum sequence, and involvement of industry in internship training. These innovations required that quality control be implemented from the beginning using traditional methods of assessing quality, as well as developing means to receive feedback from clients, professional schools attended by clients, and information from client's employers.

In establishing the evaluation scheme for the nontraditional program, several myths were discovered concerning the current evaluation of traditional programs. These discoveries are worthy of mention here:

1. Myth number one: The quality of traditional programs has been well measured. The findings did not support this. It was discovered that once an institution meets accreditation requirements and establishes some kind of entrance demand on entering students, there were no formal evaluation programs to study the performance of graduates. Therefore, information is limited on students performance after graduation.

2. Myth number two: All institutions should follow a homogenous model in offering degrees. By using essentially the same

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Table 1
Demographic Data on Graduates

Variable	N	Percentage
Age		
26-33	236	27.3
34-41	231	26.8
42-49	228	26.4
50-57	80	9.3
18-25	75	8.7
58-65	13	1.5
Sex		
Male	589	68.3
Female	274	31.7
Marital Status		
Married	660	76.5
Divorced	96	11.1
Single	84	9.7
Widowed	23	2.7
Race		
Anglo/Other	523	60.6
Spanish Surname	228	26.4
Black	89	10.3
Oriental	13	1.5
American Indian	10	1.2
Children at Home		
Yes	588	68.1
No	275	31.9
Highest Level of Education Prior to Entering SWT		
AA Degree	453	52.5
<60 SCH	244	28.3
High School Graduate	79	9.1
<30 SCH	61	7.1
>60 SCH/No Associate Degree	14	1.6
GED	12	1.4
Employment Status		
Full-time	653	75.7
Part-time	169	19.6
Unemployed	41	4.7
Rank of Active Duty Students		
Enlisted	87	53.7
Non-comm. officer	64	39.5
Warrant officer	5	3.1
Comm. officer	6	3.7
Yearly Gross Income		
20000-24999	240	27.8
30000-34999	201	23.3
25000-29999	183	21.2
15000-19999	103	11.9
35000-39999	66	7.7
40000 & over	31	3.5
10000-14999	18	2.1
5000- 9999	11	1.3
Under 4999	10	1.2
Method of Financing		
VA Benefits	364	42.2
Self-Financed	313	36.3
Military TA	109	12.6
Business/Ind. Sponsored	51	5.9
Other	18	2.1
BEOG Grant	8	0.9
Pell Grant	0	0
Current Employer		
Civil Servant	323	37.4
Business/Industry	191	22.1
Active Duty Military	162	18.8
Retired Military	113	13.1
Self-Employed	65	7.5
Other	9	1.1

criteria for quality, traditional programs move away from diversity toward homogeneity. This has the tendency to protect quality as defined and measured by historical precedence, but leaves little room for the diversity with which to attack the challenges of a rapidly changing world. Nature and the work place seem to respond to diversity rather than homogeneity.

3. Myth number three: Prescription of the curriculum for society by the institution is more valid qualitatively than election by the client. Some evidence supports this statement, but with the more motivated and experienced adult who is more goal oriented, election of curriculum and sequence takes on a difference value. If a mature student knows who they are and where they are going, total prescription can be stultifying.

4. Myth number four: A quality initial degree experience is sufficient. Evidence shows that this is not the case. Rather, the initial experience should be a base from which the student develops new knowledge and skill.

Methodology

In the establishment of quality control for a nontraditional program, traditional means were honored first. Special attention was paid to the following criteria: 1) administration of the new degrees, 2) admission policies, 3) residency requirements, 4) credit by exam policies, 5) credit for extrainstitutional learning policies, 6) appropriateness of courses, 7) availability of library and laboratory resources, and 8) off-campus course and degree delivery methods. A Public Service Council was created as an oversight committee to monitor quality and policy. The membership of the council included individuals from each of the traditional academic departments. The council decided that the nontraditional degrees must be subjected to more rigorous scrutiny than traditional programs endure. As result, systematic gathering of data from clients, employers, and professional schools was begun. A questionnaire was developed and reviewed by faculty experienced in nontraditional education and piloted in selected academic classes. The reliability coefficient for the items on the questionnaire was 0.9331. The Kuder-Richardson Formula 20 for dichotomous items was used to calculate the reliability coefficient. Following the developmental phase it was mailed to 3154 graduates of nontraditional degree programs at Southwest Texas State University.

Results

Of the 3154 graduates, 863 or 27.4% responded to the questionnaire. Considering the difficulty involved in contacting graduates over a substantial time period, the response rate was satisfactory. However, generalizations should not be made beyond the sample group. Table 1 has basic demographic data on graduates who responded. The majority of the graduates (54.1%) were between the ages of 26 and 49, male (68.3%), married (76.5%), anglo (60.6%), employed full-time (75.7%), and pursued their academic program on a part-time basis (68.8%).

Table 2 compares the percentage of students on probation by major. This table demonstrates that nontraditional Occupational Education students had the smallest percentage of students on probation. This is to be expected because of the older students' motivation and maturity level.

Table 2
Comparison of Probation Statistics

Major	Percentage on Probation
Occupational Education	6.07
Music	13.97
Physics	16.22
Education	16.33
Special Education	16.53
Speech Communication & Theatre Arts	16.59
Art	16.89
Accounting	17.37
Health Professions	18.22
Modern Languages	18.33
English	19.42
Chemistry	19.83
Journalism	20.18
Geography and Planning	20.68
Biology	21.62
Political Science	25.00
Sociology/Anthropology	25.14
Finance and Economics	25.38
History	25.74
Home Economics	25.80
Mathematics and Computer Science	26.03
Management and Marketing	26.69
Criminal Justice	27.51
Health, Physical Education, & Recreation	28.33
Philosophy	31.25
Psychology	31.54
Technology	32.31
Agriculture	33.63
Administrative Sciences and Computer Information Systems	46.15

A comparison (Table 3) of GPA between traditional and nontraditional students reveals the Occupational Education students rank fourth from the top of fourteen departments. Only graduates from the departments of Chemistry, English and Economics have a higher GPA. The nontraditional students' GPA of 2.83 compares favorably with the leaders.

Table 4 displays the relative satisfaction or dissatisfaction with the acceptability and negotiability of the nontraditional degree from the clients perspective. It is important to note that all five factors were rated highly. Apparently, the nontraditional degree had great utilitarian value and improved self-image. Additionally, they felt the rigor in the program was high and the degree contributed to salary increases and career mobility.

Table 3
Comparison of GPA by Major

Major	Undergraduate GPA
English	3.01
Economics	2.87
Chemistry	2.86
Occupational Education	2.83
Sociology	2.66
Mathematics	2.64
Agriculture	2.53
Political Science	2.49
Psychology	2.47
Home Economics	2.44
Technology	2.44
Criminal Justice	2.42
Management	2.37
Philosophy	2.37

Table 4
Graduates Perceptions About the Program

Satisfaction Factors	*Mean	Standard Deviation
Career usefulness	1.371	0.615
Improved self-image	1.401	0.621
Level of difficulty compared to traditional programs	1.655	0.814
Salary increase	1.903	0.885
Career mobility	2.000	1.050

*Based on a five point scale (high = 1 and low = 5)

Table 5 indicates that employers of nontraditional students generally felt that the degree was career useful and increased job productivity in the work place. Employers also attributed economic value to the degree by awarding salary increases. In general, all satisfaction factors received high ratings.

Table 6 indicates that adults are interested in attending college for a number of reasons. Some attend for pragmatic reasons. Over half (64.9%) indicated that increasing their income was very important. Additionally, 58.3% felt that the development of a new career pattern with the academic credential was important. According to mean scores, the most powerful factor affecting enrollment was related to personal satisfaction and development.

Table 5
Employers Perception About the Program

Satisfaction Factors	*Mean	Standard Deviation
Career usefulness	1.254	0.736
Job productivity	1.531	0.691
Salary increase	1.913	0.832
Career mobility	2.410	1.131
Improved self-image	2.589	1.011

*Based on a five point scale (high = 1 and low = 5)

Table 6
Why Adults Pursue an Academic Credential

Adult Learner Needs	Percentages			*Mean	Standard Deviation
	Very Important	Somewhat Important	Not Important		
To attain greater personal satisfaction and development	63.3	27.5	9.2	1.457	0.659
To increase my income	64.9	23.5	11.6	1.463	0.694
To satisfy my personal desire to have a college education	64.4	20.2	15.4	1.507	0.749
To develop a new career	58.3	30.1	11.6	1.531	0.696
To develop specific job skills	54.1	33.6	12.3	1.549	0.695
To satisfy degree requirements for job	50.7	26.2	23.1	1.722	0.816
To meet academic requirements to enter Graduate School	45.9	31.9	22.2	1.760	0.793
To develop understanding of science and technology	14.8	41.3	43.9	2.286	0.717

*Based on a three point scale (very important=1, somewhat important=2, not important=3)

Information gathered from graduate and professional schools was obtained orally and done on a limited sample. A noticeable pattern developed from the data. Occupational Education students do about as well as the traditional student in further graduate training and tend to do better in law schools.

Conclusions and Recommendations

The general conclusion is that quality of the nontraditional degree is high as measured by clients, employers, and graduate schools. It is also important that constant vigil on quality be maintained. There is the possibility that the quality measured may be effected more by student maturity than program characteristics.

Since a nontraditional program will always be suspect to the traditional academic community, quality controls must ever be stronger than those for traditional programs. It is recommended that, in addition to the information currently being kept on Occupational Education students and their subsequent performance in life, that the following data be collected and evaluated:

1. Graduate Record Examination scores on those students entering graduate schools be gathered and compared to traditional students.
2. Scores from nontraditional students taking professional school entrance examinations should be collected and subsequent student performance in these schools should be monitored.
3. Employers in the region who hire and are likely to hire nontraditional graduates, and who provide internship places should be invited to participate in policy setting for quality control in nontraditional degree programs.

Quality can no longer be assured by institutions of higher education through student selectivity, admissions, and program homogeneity. Institutions must develop programs to fit student needs and these programs should be evaluated in terms of client and employer satisfaction.

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COLLABORATIVE ASSESSMENT OF LEARNING OUTCOMES BY ADULT LEARNERS IN A NON-TRADITIONAL PROGRAM

Ruth F. Hooke

The words "collaborative" and "assessment" are not usually found together. Assessment is usually thought of an a private and individual matter, one that starts with students filling out a questionnaire or taking a test alone, not sharing answers with even one other person, let alone a group. Certainly all of us can conjure up the picture of a teacher in our elementary school years telling us never to look at someone else's paper during a test.

However, I am convinced that adult learners can not only assess their educational outcomes in a collaborative way but also that such collaboration can become a source of new growth and development for them. Using a group process for assessment helps adults to affirm their learning in a public way, enables them to deepen their insights by hearing about others' learning, and sends them from the educational experience with a strong sense of the ways in which they have been changed by it. Such a group experience at the end of an educational program can also build a sense of community in our non-traditional programs and provide us with insights into what our adult learners are gaining from those programs.

In order to demonstrate this I lead a group of 12 adult learners in the University Without Walls at U/Mass, Amherst, through a six question self-assessment process in a classroom setting over six weeks, focusing on what they had gained from their recently completed general education experience. Each question was discussed by the whole group and the discussions were recorded and transcribed. A classmate took notes while her partner spoke and these notes became the basis of a written answer to the same question, completed at home. Together the transcribed oral comments and the written answers became a rich record of the the meaning that these adults had made of their educational experience. In a follow-up questionnaire the participants also indicated how much the group process had helped them with the assessment.

Background

Impetus for this experiment came from several quarters. First, there is the general call for assessment and acountability in higher education (Hartle, 1985, Ewell, 1987). While much of what is written in the cause of assessment seems inapplicable to those of us who work in non-traditional programs, we cannot

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ignore the need to find some meaningful way to discover our learners´ educational outcomes.

Second, many writers say that assessment methods should be individualized to meet the needs of specific populations and programs (Adelman, 1985, Ewell, 1987); moreover, some of the most innovative ones (ie., Alverno) have been successful because they were tailor-made for a particular institution. Those of us who work in non-traditional programs need to design assessment processes that suit our own needs.

Third, most thinking about assessment is geared toward "traditional" 18 - 22 year-old learners, not toward adults. This is the judgment of Pat Hutchings, director of the American Association of Higher Education Assessment Forum and thus in a good position to make this observation (Hutchings, 1987). Adult learners are rarely mentioned in assessment literature nor even in the national reports calling for greater accountability, even though some of the reports acknowledge that the number of adult undergraudates is rapidly growing.

Fourth, very few assessment instruments are designed with adult learners in mind. Lehmann (1981) discusses the applicability for adults of several standard evaluation measures, but indicates that only one, Program Effectiveness and Related Costs (PERC) from Empire State College, "specifically confronts the evaluation isssues raised by an individualized educatonal program for adults" (p. 757). And even though PERC has some interesting features, it is actually much more oriented toward program evaluation than toward finding out what meaning the adult learners made of the experience for themselves.

Finally, Pat Cross (1986) has challenged us to do what she calls "classroom assessment," by which she means the instructor´s finding out right in the classroom what students have learned. Although she sees that there might be some limitations to such "situation-specific" research, she also believes that it will give "useful information into the teaching/learning process" (p.67), presumably for both teachers and learners alike.

Toward Collaborative Assessment

Armed with the knowledge that outcomes assessment is valuable, that it can be individualized, that adult learners are mostly ignored both in assessment theory and practice, and that valuable work can be done right in the classroom, I set out to find a mode that would meet the needs of our adult learners at UWW. My primary focus was to discover how to help learners reflect on their own experience in ways that they freely chose, rather than in categories that were chosen for them; a secondary goal was to find an assessment procedure that could be useful to our own and possibly other non-traditional programs.

Readings in both assessment and adult development theory helped me realize that adults not only need an assessment approach that is geared to their needs, interests, and diverse backgrounds, but also that group reflection on learning outcomes could become a source of new learning. I am much indebted to several developmentalists for this latter understanding, most notably Robert Kegan (1982).

Kegan posits the idea of "subject/object relations" as central in understanding the developmental process. He believes that we move to a new stage of development when that which has been a subjective part of us can become as object instead. New meaning is made as we stand back and reflect on some part of our experience, objectifying it for ourselves. An important part of being able to grow in this way is the "holding environment," which both confirms, contradicts, and offers continuity to the individual during the period of change (pp.116ff).

Out of such insights the idea of collaborative self-assessment was born. Why shouldn´t adults share their reflection on and evaluation of their learning experiences? Why couldn´t the group provide the holding environment in which such reflection led to new understanding? Whatever else an assessment process for adult learners should be or do, I came to the conclusion that it could be done effectively in a group.

Characteristics of a Self-assessment Process for Adults

In time and through experimentation I have also identified five other characteristics of such a process. I believe that an appropriate self-assessment process for adult learners should do the following:

1) Contain open-ended questions,
2) Demonstrate the connections between cognitive and affective growth,
3) Allow time for reflection and integration,
4) Serve the learner,
5) Serve the institution,
6) Be done in a supportive group.

The first four characteristics make it possible for the group process to work, while the fifth makes it possible for it to happen at all. These six characteristics make a package of guidelines flexible enough to be used in a variety of situations, yet clear enough to provide direction for those designing assessment procedures in other non-traditional programs.

Speaking more specifically about each of these six characteristics, open-ended questions allow adults to choose freely from their "full repertoire of possible responses", to use Patton´s (1980, p 212) definition of the term. Such questions assure that this is a learner-centered assessment, appropriate to the needs and maturity of adults (cf. Knowles, 1970).

Demonstrating the connections between cognitive and affective learning is also a critical characteristic of such a process. Adult learners are practical people, living in the worlds of work and family while attending school, and they want to understand how the educational experience affects their whole lives (Weathersby and Tarule, 1980). Moreover, as Kegan (1982), Loevinger (1976), and other developmentalists point out, growth is structural; growth in one area means growth in other areas as well.

As for the third characteristic, time for reflection and integration, assessment of the sort envisioned above takes time, more time than the usual 30 - 45 minutes allotted to a written outcomes questionnaire. Not only does it take time for a group to develop so that learners are willing to trust their answers to others; it also takes time to think through the answers in a meaningful way and to allow all members to participate. Daloz (1986) talks of adults "naming their wholeness" at the end of an academic program and calls it "a time for healing" (p.152).

The fourth characteristic, serving the learner, has been stressed repeatedly by those in charge of the successful assessment program at Alverno College (1985). Although their system is designed primarily for the traditional age college student and although serving the learner in their lexicon means having the student understand and apply to herself levels of achievement in eight prescribed learning outcomes, nevertheless their emphasis on the ultimate goal of assessment is rightly placed. Whatever else an assessment program might do, it will fail unless it serves the learner. Moreover, busy adults with limited time to spend will need to know just how they are being served.

That an assessment process should also serve the institution or program it assesses seems like a truism, but Marchese (1987) and others indicate that it is not. Much information gathered from such a process either fails to get back to those in decision-making roles or else is not geared accurately to the program´s goals. The kind of process envisaged above brings immediate feedback to the group facilitator and thus to the program; it also provides information not simply about what program goals have been reached but also about what a certain group of adults has found those goals to be.

Finally, the group or collaborative aspect of self-assessment for adult learners may be its most important single characteristic. It allows open-ended questions to be fully explored in a supportive atmosphere, it provides a space for connections to be made between cognitive and affective learning, it gives structure so that reflection and integration can take place, it serves the learner by offering a forum for evaluaton, and it provides immediate feedback to the institution through the group leader. It also provides the environment for what Belenky et al. (1986) call "real talk," so important in higher stages of knowing.

The experiment

The above six characteristics became the guidelines for the self-assessment exercise which I did with a group of 12 adult learners in the University Without Walls (UWW)/U/Mass during the spring semester 1987. An undergraduate degree program for working adults, UWW has two tracks, one of them designed especially for those with little or no previous general education and called Inquiry Without Walls (IWW); the participants were in that group.

All of them had recently completed the required curriculum for their particular track, consisting of an introductory seminar and one seminar in each of the three major academic areas: humanities, social sciences, and science. The participants had also rounded out their general education with university course work, some independent study, and beginning exploration in their area of academic concentration. Their advisors and they had decided that they were ready for the program's integrative seminar which would prepare them for an individual "Celebration Evaluation" marking the completion of the general education portion of the undergraduate degree.

As the instructor of that integrative seminar, I decided that the best preparation for the Celebration Evaluation was to go through a group self-assessment process. Dividing the class into pairs, I asked the partners to take notes while each other spoke during the hour-long discussion of one assessment question a week; the notes became the starting point for a written answer to the same question, done at home for the next class.

The partner arrangement had the added benefit of molding this diverse collection of individuals quickly into a working group. Trust built rapidly and there was an open sharing of experiences and learning. In fact, they all became so intrigued by each other's responses that by the fourth session they were forgetting to take notes; consequently, note-taking was abandoned by common consent. By that time the juices were flowing and notes were not needed as a starting point for written answers.

Written answers tended to complement oral ones and were particularly important for the less talkative members of the group. Some participants repeated in writing what they had said in class; others expanded on that, and still others took off in a new direction. However, limiting written comments to two pages per question and the class discussion to one hour a week kept the data manageable. Moreover, giving them the following week's question to ponder during the week also gave substance and focus to the class sessions.

The six questions were as follows:

1) What stands out for you as you think back on your college

education? What surprised you about it?
2) What changes do you notice in yourself as a result of your educational experience? What changes do you notice in relation to your job? your family? your community? your future plans? your ability to think and to communicate?
3) What particular learnings or experiences in IWW/UWW were important in creating these changes? Describe in some detail at least one experience and its effect on you.
4) What would you change about IWW/UWW if you could? What would change about the university?
5) What would you change in your educational program? What would you have done differently? Why?
6) What do you think is the purpose of a college education? Have you changed your views on this since entering the program?

The first question, also the most open-ended, encouraged a wide variety of response; the second part of it introduced the reflective mood. The second question invited comparisons of self before and after the educational experience, comparisons in both the academic realm and in the other worlds in which adults live. The third asked for connections to be made between experience and learning. The fourth introduced the possibility of critique of what had been given to or required of the learners, while the fifth invited them to evaluate their own response. The sixth question was a sort of wild card, intended to get at growth in learners' total perception of the educational enterprise. After the whole exercise was over, the participants also were asked to evaluate in writing how it had worked for them.

Results: Getting it All Together

The results were both revealing and heart-warming. One notable characteristic of both spoken and written answers was their honesty. Learners spoke of their initial anxiety about school, their feelings of being awkward and out of place as older students, their confusion about procedures, their preoccupation with their age, their fear of failure, and yet their eventual ability to overcome these negative thoughts and to succeed. They gave a lot of credit for that success to the supportive atmosphere of their four UWW seminars and to the encouragement of their advisors.

Another outstanding theme of the responses was new-found joy in learning and in themselves. Joy, happiness, excitement, satisfaction were words frequently used to describe their educational experience, as were improved self esteem, self confidence, awareness, focus, sense of purpose and of the future. Words like critical thinking, communication skills, and problem-solving ability, so dear to those of us who teach, were rarely used. In many ways, habits of the heart seemed as important, if not more important, to these adults than habits of the mind.

Moreover, the learners frequently made connection between something which had happened in a classroom and their own changed values, attitudes, beliefs, or self concept. They didn´t need to be told by the developmentalists that cognitive and affective growth were inextricably interwined; they had experienced it. Following is a typical example:

> I´ve come out of my Shakespeare class with some pretty good feelings a time or two. One night in particular I and a very attractive young man had to read a long portion from Anthony and Cleopatra. As it had been 24 years since I had done any serious reading I was a tad nervous... My face got hot and very red, my hands were perspiring, and my legs were shaking; fortunately I was sitting down. In spite of all this I found myself falling back into reading the way I had taught so many years ago. The young man read well and the scene went on without too many mistakes. Upon completion of that particular scene, though, the professor gave us another to read. By then I was on a roll, even though one part of me was constantly critiquing as I went along. When the class finished, the people next to me said, "You read so well," "I wish I could do that." That night I walked out of there four feet off the floor and stayed there all the next day.

As this example also indicates, the learners were fine story tellers and seemed fully to enjoy telling about their learning experiences.

In addition, they didn´t hesitate to criticize when they thought it was warranted. Although for the most part they had high praise for the IWW/UWW program, they also criticized its lack of initial structure, the pedagogy of one of the required seminars, and the vagueness of some of their advisors, among other things. About the university in general they had plenty of criticism, especially around lack of course offerings at night, too large classes, insensitivity of some instructors, and lack of parking facilities.

Finally, and perhaps most important to the considerations of this paper, they found the group process extremely valuable to the whole assessment exercise. This was made clear in comments after class, in an oral and written evaluations of the process after the initial exercise was over, and in reading the transcription of the class discussions. One learner even said that she didn´t think she´d learned anything until she heard her fellow classmates talk; then, "A light went on," she said. Others said that the group gave them the support necessary to the task, helped clarify learnings, stimulated thought, enabled them to remember better, deepened their understanding of what they had learned, gave other perspectives on what was important, and offered diversity of approach.

In addition, when asked if she would recommend the group process to the next group of students, one learner wrote:

> Yes. Despite the fact that one might think she knows what she would answer if any of those questions were posed, often

> one´s thoughts are vague, underdeveloped, or inherently untrue. The process of expressing them helps to strengthen the real convictions and to weed out or change those which are poorly developed.

This statement not only extols the virtues of group process in assessment but also could be a commentary on the limitations of other quicker and more individualistic approaches.

Out of the whole experience I have become convinced that adult learners are quite able to assess their learning outcomes in a way which is both meaningful for them and revealing to the program, provided they have a supportive group of peers in which to accomplish the task. Any procedure which has the six characteristics discussed above could produce valuable results. It could be done within the structure of a regular course or at an all-day or weekend workshop/seminar. 12 participants proved to be a workable number, but it could be done in a group as large as 20; if a larger group were envisaged, it would need to be broken into sub-groups, each lead by a person with experience in small group leadership. Leaders could be students who have already been through the process. Both oral discussion and written answers seem crucial to the procedure but the results could be kept more manageable if, instead of being recorded and transcribed, the group discussion were considered the preparation for the written answers.

The single most important feature of the process is that adult learners collaborate in assessing their educational outcomes. Group assessment will give them greater understanding of what they have learned, will give them a sense of common enterprise, and will strengthen the learning by making it visible to others. Program planners and decision makers who receive the results will gain important insights into the meaning that adult learners are making of our programs and into how we could make them even more meaningful for them.

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THE B.A. IN APPLIED BEHAVIORAL SCIENCES: ASSESSING LEARNING OUTCOMES IN AN ANDRAGOGICAL MODEL

Lynette La Hay, Ed.D.

National College of Education was founded in 1886, originally to educate young mothers regarding the developmental needs of their children. Founder Elizabeth Harrison espoused the beginning of the kindergarten movement. The school then moved into the training of teachers and became nationally recognized (1987-88). National College parlayed its expertise regarding teaching into the growing field of adult education. With the creation of a Bachelors degree completion program in Applied Behavioral Sciences and a Master of Science program in the Management and Development of Human Resources the college began to create additional campus sites. Along with the flagship campus in Evanston, Illinois there are two other campuses in the Chicago area, centers in St. Louis, Missouri and McLean, Virginia. The marketing and administration of the two above mentioned programs have promoted National College's reputation as an innovative organization, flexible and responsive to the American cultures educational demands.

According to Daily (1984), an open system is designed to ". . .be adaptive, flexible and responsive to internal and external stimuli. Multi-channel communications, networking, innovation, creativity and risk-taking are all elements of an open system. There is no doubt that andragogy would thrive in an open, future oriented organization." National College's innovative B.A. in Applied Behavioral Sciences and M.S. in the Management and Development of Human Resources are designed according to andragogical principles. Among those andragogical principles supported by these programs are a responsive, interdiscplinary, developmental stance; a mutually respectful collaborative atmosphere; high task, high relationship approach of the instructors (which includes mentoring and modeling); internal motivation (of the students) and self-directed learning. Also included are two-way, supportive communication and criterion-based, objective and subjective student evaluation(1984).

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Both the B.A. and M.S. degree programs contain what Hunkins (1987) calls "knowledge that" and "knowledge how." Knowledge that refers to the ". . .specific facts, concepts, rules, principles, generalizations and theories" regarding a particular subject. Knowledge how includes "various ways of processing information and advancing knowledge." (p.65). For the purposes of this paper the emphasis will be on the B.A. degree in the Applied Behavioral Sciences which includes the following courses:

Dynamics of Group and Organizational Behavior
Career Assessment and Planning
Systems Management
Statistical Methods and Research
Effective Interpersonal Relations
Multicultural Dimensions
Principles of Management and Supervision
Philosophy of Values and Ethics

The curriculum also consists of a life-learning portfolio (consisting of prior learning) and a senior research project.

Andragogical Learning Principles

Malcolm Knowles (1970) maintains that individuals move from a state of dependency to become more independent and self-directed. The individual also moves from a time frame of postponed applications of learning to more immediate applications of learning, from being subject-centered to problem-centered. Jacobs (1972) addresses the issue of students learning from each other, as well as the instructor. She maintains that if students become a part of discussion groups independent thinking as well as the giving and receiving of ideas stimulate intellectual maturity. Lam (1985) supports this view and maintains that adults ". . . have a clear perspective of their needs and. . .that meaningful learning occurs maximally for adults only when their life experiences can be accomodated in the instruction they receive." Lam urges higher education faculty to blend the wealth of learning experiences brought by the adult learner while stimulating new intellectual inquiry. (Weiland, 1977).

Facilitation as a teaching methodology has been embraced by those supporting andragogical teaching/learning principles. Crapo (1986, p.446) quite succinctly lists some basic principles to remember when facilitating adults:

- * Never teach an adult something she or he already knows.
- * Never tell a group anything you can get from the group itself.
- * Always trust the group to move the program along. Listen for the clues.
- * Get out of the groups way.

Stuart (1986, p.253) supports Crapo in encouraging the adult learner to ". . .have a major responsibility for resolving problems, and (that the) teacher is an enabler who helps bring this about."

Carl Rogers (1969, p. 104) elegantly expands the premises of both Stuart and Crapo by maintaining that:

> The goal of education, if we are to survive, is the facilitation of change and learning. The only man who is educated is the man who has learned how to learn. . .Changingness, a reliance on process rather than upon static knowledge, is the only thing that makes sense as a goal for education in the modern world.

The nature of the adult learner (problem-centered, increasingly independent, accumulator of many lifelearning experiences) and the utilization of andragogical principles to educate him stimulates innovative evaluation methodologies.

Assessment of Learning Outcomes - the B.A. in Applied Behavioral Sciences

There are three major assessment methodologies employed in this andragogical degree program. Evaluation of most of the courses (save Statistical Methods and Research and Career Assessment and Planning) is accomplished through an Applied Summary Paper and class participation. Each of the courses states specific learning objectives and the Applied Summary Paper, is a skillful blending of the readings with the classroom discussions, simulations and films. The Statistics course is evaluated through an objective examination and the Career Assessment and Planning course through the lifelearning portfolio.

Stuart (1986, p.255) maintains that the facilitative instructor

-evaluates the session in terms of objectives

-considers effectiveness of activities

-modifies and replans where necessary.

Each course is designed with specific learning objectives and the Applied Summary Paper is designed to reflect the learning that has taken place. An example of some learning objectives from the Philosophy of Values and Ethics course follow. (1987, p.1).

1. Students will have a clear understanding of what values are.

2. Students will reinforce their beliefs regarding the basic moral nature of mankind.

3. Students will apply their ethical codes to real-life work situations.

4. Students will learn from case studies regarding ethics in the workplace.

Portfolio

F. Gerald Brown (1980) suggests that there are several interpretations of experiential learning:

> * "learning how to perform a specific act or operation by doing it,
>
> * learning the complexities of a professional role by experiencing the milieu in which the role is performed and attempting to perform parts of the role (role socialization),
>
> * . . .an individual's conscious and focused use of the rich experience of life, including formal learning settings, to further a largely self-constructed learning agenda (learner managed experiential learning)."

In respect of the rich and varied learning which does take place outside of a formal classroom setting the lifelearning portfolio was developed. It consists of five sections:

I Resume

II Academic transcripts and military documents

III Transcripts or certificates of completion from professional school/courses

IV An Autobiography

V Lifelearning experience essays

Up to 60 quarter (40 semester) hours of academic credit may be garnered from the portfolio. Only two sections yield credit: section 3 (professionl schools) and section 5 (lifelearning essays). These essays are composed around the Kolb model. This model is a four phase process of how a learning experience takes place:

I Concrete Experience

II Observations and Reflections

III Abstract Concepts and Generalizations

IV Testing Implications

The portfolio is due the tenth class session. Section 3 technical credit is assessed by specially trained Assessment Center counselors at NCE's Lombard, Illinois campus. Section 5 essays are submitted to faculty readers who assess academic credit, which subsequently appears on the students transcript.

Research Project

Cross (1981) presents the following conclusions regarding the trend toward self-directed learning for adult students:

> * Participation in self-driected learning is almost universal. Studies report that as much as 100 percent (Collican, 1974, 1975) of all adults conduct a minimum of one learning project per year.
>
> * The typical adult spent about one hundred hours on each learning project, conducting five projects per year. . .
>
> * Almost three-fourths of the learning projects of adults are completely self-directed; about 15 percent involve group learning, 10 percent are one-to-one learning situations, and 3 percent utilize completely preprogrammed, nonhuman resources such as tapes, programmed instruction, and television. (Tough, 1978, pp. 63-64).

Responding to the trends discussed by Cross, National College of Education requires the successful completion of a senior research project for graduation from the B.A. in Applied Behavioral Sciences program. This project provides a vehicle for the student to demonstrate systhesis of knowledge and skills acquired in the B.A. program. Supervised by two faculty members, the student selects a work-related organizational problem to investigate. The research project reflects the ability of the student to:

- * integrate and apply knowledge and skills acquired through coursework;
- * develop skills in recognizing, stating and solving problems objectively and systematically;
- * understand the value of research projects in business and management;
- * refine both oral and written presentation skills.(NCE brochure, 1987).

Typically the student completes several drafts of the nine chapter project, continually refining his writing skills. At three different points in the program students are required to present a 15-20 minute presentation on their progress. Two of these presentations are graded, along with a final grade for the research project.

In summary students enrolled in the B.A. in Applied Behavioral Sciences program are evaluated in three significant ways: lifelearning portfolio, Applied Summary papers, and a senior research project. These methodologies provide a comprehensive way to evaluate knowledge synthesis and application, oral and written communication skills.

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PROFESSIONALIZATION OF DISTANCE LEARNERS: A FIVE YEAR STUDY OF GRADUATES OF THE NEW YORK REGENTS EXTERNAL BSN DEGREE PROGRAM

Carrie B. Lenburg

Nurses have been returning to school for a baccalaureate and subsequent degrees for decades. I did it, and probably so did the majority of nurses in leadership positions. Some of us became committed to this educational mobility as a way of upgrading and "professionalizing" the nursing profession, yet others who took the same route have expressed skepticism and concern about the possibility that nurses from diploma, associate degree, or practical nursing backgrounds can become resocialized, or professionalized through educational mobility programs. For nearly 20 years this issue has been debated at national conferences and the subject of studies and manuscripts, many of which were reviewed by Lenburg (1986) in the Annual Review of Nursing Research. The issues relate to whether or not experienced adult learners can change values, attitudes and competencies, and if so, how do they do it, and ultimately how do we know they are professionalized. For those of us committed to the philosophies of competency-based adult education and objective assessment, the decision of whether or not a nurse is professionalized is based on the evidence of practice behaviors provided by the graduates, their supervisors in the workplace and by faculty members in graduate schools where these continuing learners pursue their careers.

Purpose of the Study

The purpose of this total study was to analyze the performance of Regents College (RC) BSN graduates in comparison to graduates of other BSN programs. The particular focus of this presentation is the analysis of the graduates' performance in the workplace and in graduate school, and their professional values in comparison with graduates of other BSN programs. We wanted to find out from graduates, supervisors and graduate school faculty how well RC graduates had been "professionalized" as evidenced by their competence, values and attitudes. The study is especially relevant for graduates of this external degree program because all of their learning was obtained external to the institution awarding the degree. They learned the expected and required competencies; the RC program validated and credentialed that learning. The final evidence, however, is reflected in subsequent practice in multiple and diverse settings and in comparison with graduates from conventional programs.

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Background and Review

Regents College, of The University of the State of New York, shares many goals and activities with conventional campus-based programs. However, it differs significantly in the ways students learn and the methods used to recognize and credential that learning. Rather than providing classroom instruction, RC provides the focus for learning through its degree requirements, and related study materials. It provides a comprehensive system of objective assessment of college-level knowledge and skills, using transfer credits from regionally accredited colleges, recognized proficiency examinations, nursing performance examinations, and other specialized evaluation procedures. Sometimes referred to as "a national examining university," as opposed to a teaching university, RCD grants credits whenever college-level knowledge is validated through the use of faculty-approved, objective, academic assessment methods.

Regents College (RC) offers the only national total assessment nursing programs, and thus it is unique. Since 1972, RC has developed associate and baccalaureate programs in nursing, largely through grants of more than $3.5 million from the Kellogg Foundation. (RC is not a state supported college, and it frequently is confused with the SUNY system.) These funds made it possible to use a research orientation to develop, implement and evaluate the programs and their innovative, cognitive and performance examinations in nursing.

The BSN program, used as the focus of this paper, requires 72 credits in arts and sciences in addition to the nursing component. The theoretical content of nursing is assessed in five nationally standardized written examinations, covering Health Support, Health Restoration and Professional Strategies. Outside the State of New York these are known as ACT PEP tests and are administered by the American College Testing Program. The clinical component of nursing is documented through the four performance examinations, which I will highlight briefly because of their importance to this study.

The Clinical Performance in Nursing Examination (CPNE), developed initially between 1972-75, assesses competencies required to apply the nursing process in direct care to actual, hospitalized adult and child patients; it is worth 8 semester credits.

The Health Assessment and Teaching Performance Examinations (HATPE), developed between 1976-79, are two examinations administered back-to-back, which assess two sets of competencies: 1) conducting a comprehensive history and physical examination, and 2) client teaching. They are worth 8 semester credits.

The Professional Performance Examination (PPE) was developed initially between 1976-79 and is worth 12 semester credits. It uses a total simulation format, based on sophisticated videotaped clinical situations which assesses the complex competencies of collaboration, leadership, management of client care, research process in practice, clinical decision making and relating with others. It uses diverse problems, settings and client groups.

These examinations are administered several times each month through the RC national network of Regional Performance Assessment Centers (RPACs), in NY, NJ, GA, WI, and CA. All RC BSN students must pass these examinations to document competence. In this external degree program in which learning is self directed and acquired in diverse ways, documentation of competence and achievement of professionalism is even more objective, rigorous and comprehensive, than in conventional programs. The concept of "clinical examination," as used in this program differs from clinical evaluation in almost every aspect. Another presentation at this conference highlights the philosophy and conceptual framework that undergird the development and use of these unique examinations.

Some of the questions RC and other unconventional programs must answer, relate to quality outcomes, including professionalization. For example: Do examinations actually screen out students who are not competent? Do they document content and abilities equivalent to those of students in other BSN programs? and, Do they provide the basis for confidence that the graduates have acquired professional values and attitudes? Cross & McCartan (1984) provide an excellent resource for faculty and policy makers regarding quality assurance concerns of nontraditional adult education programs. Educational quality is essential for competence and thus to professionalization. Some of these connections have been made in nursing by Hinshaw (1976), Leddy and Pepper (1985) and Lenburg (1984 & 1986).

Methods

Data were obtained from the graduates, their immediate supervisors and faculty members in masters' programs in which they had enrolled. Three follow-up studies conducted between 1980 and 1985 were compared to determine whether or not the groups were homogeneous. Analysis indicated that they were almost identical in every category; thus, the findings presented here are from the most recent study but are generalizable to the total population of approximately 1600 BSN graduates of Regents College.

Subjects in this latest study completed the BSN program between 1983-1985. Mailed surveys were obtained from 344 graduates (68%) and from 171 supervisors (71% of the 241 surveyed). In addition, data were obtained from 41 MSN faculty members for the 53 graduates who had enrolled in or completed graduate school (77%).

The following is a typical profile of BSN graduate: 38 years old, has children at home, works full time, has worked in nursing for 10 years, and has completed a diploma or associate degree program.

This group also was typical of RC graduates in plans for obtaining graduate degrees: 53 (15%) were enrolled in or had completed MSN programs and 114 (33%) planned to pursue an MSN. Three-fourths of the graduate respondents were working full time in hospitals and had held their positions for about 4 years: 26 % as staff nurses, 47% as managers or administrators, 14% as educators. Participants resided in 40 different states and 8 foreign countries; half of them lived in the Northeast, a quarter were in the West and the others lived in the South and Midwest.

Typical descriptive statistical methods and correlations were used for this aspect of the study and are only briefly mentioned here; a more detailed research report is planned for publication.

Findings and Interpretations

Evaluation of Competence in the Workplace:

The two major portions of the study focused on evaluation of the graduates' competence in the workplace and in graduate school. Table 1 summarizes the overall evaluations from graduates and supervisors related to quality of work performance. Both groups were asked to evaluate the competence of RCD graduates in relation to other graduates in five general areas associated with professionalization: overall nursing performance, knowledge, clinical competence, values and attitudes and self direction and autonomy.

In every category, positive correlations were observed between ratings of supervisors and graduates; supervisors rated the performance of RCD graduates as higher than that of other graduates. The similarity in opinions between graduates and their supervisors supports validity and reliability of the curriculum and assessment methods, and supports the graduates' objectivity, which is one indicator of professionalism.

Graduates rated themselves as more self directed than did their supervisors, but even so, 80% of the supervisors reported that RC graduates were observed to be more self-directed and autonomous than their peers. The overwhelming majority of the supervisors reported that the performance of RC graduates was higher than that of their peers in overall performance, knowledge, clinical competence and in professional values and attitudes.

These findings are consistent with findings from several previous studies. Documented consistency in evaluations of same or similar behaviors by multiple raters is an important means of supporting validity and reliability. The findings also provide evidence of the program's effectiveness to accurately assess competence and preparation for professional practice in diverse settings.

When asked to compare the practice behaviors of RC graduates to those of their peers, at least 75% of the supervisors rated RC graduates as very good or good on the following behaviors:

Table 1
Overall Evaluation By RCD Graduates and Supervisors (Follow-Up 6/88 - 1/85)

	GRADUATES[a]		SUPERVISORS[b]	
	n	%	n	%
Overall Performance				
Higher	208	65	115	68
Same	109	34	37	22
Lower/unsure	1	1	17	10
Knowledge				
Higher	180	57	110	65
Same	129	41	44	26
Lower/unsure	8	2	16	9
Clinical Competence				
Higher	213	67	109	64
Same	102	32	46	27
Lower/unsure	4	1	15	9
Values and Attitudes				
Higher	192	62	117	69
Same	108	34	40	24
Lower/unsure	10	3	12	7
Self Direction				
Higher	274	86	144	80
Same	43	13	27	15
Lower/unsure	2	<1	9	5

NOTE: Percentages based on the number who responded to each item.

[a] n = 344

[b] n = 171

sensitive to clients' values	88%
understands professional roles	87%
Uses appropriate communications	85%
collaborates with others	85%
delegates responsibility	75%
evaluates nursing care	75%
uses leadership skills	79%

All of these behaviors are assessed in the performance examinations: CPNE, HAPE, TPE, and PPE.

It is interesting that fewer than 5% of the supervisors rated RC graduates as poor or very poor on any one of the objectives. On the other hand, supervisors rated graduates higher on research abilities than did the graduates; the graduates rated themselves higher than did supervisors in 6 areas, including:

understands roles and responsibilities
delegates responsibility
evaluates nursing care
uses manipulative skills
uses leadership skills
collaborates with health professionals

These behaviors are assessed particularly in the performance examinations. Students are required to demonstrate competence on specific critical elements in each of these areas of practice; thus, it is not surprising that supervisors and graduates reported positive findings related to these behaviors.

The large number of respondents and the fact that both groups were dispersed nationally and in diverse settings, further enhances confidence in the validity and reliability of this examinations and process. The findings also support the predictive validity.

Professional values and attitudes:

Many of the behaviors already reported are associated with professional values and attitudes and are not repeated here. Other indicators of professional involvement include the following: Ninety percent (90%) of the graduates reported reading at least one journal and 70% hold membership in at least one professional association. The majority reported attending meetings.

When asked about role models, 82% of the graduates reported that they learned professional values, attitudes and roles from others, such as: former instructors (40%), head nurses (28%); staff nurses (25%); and supervisors (21%). Supervisors and graduates were asked to rate the importance of ten professional values. The majority of both groups rated the following values listed as very important:

sensitivity to different values
awareness of staff values
making informed decisions
observing legal limits
professional development
accountability

An interesting observation is that most graduates also rated "making decisions autonomously" as very important, while supervisors rated compliance with regulations and long term commitment as very important for graduates. This is an interesting contrast of opinions.

These findings provide ample evidence that the graduates have the practice competencies and the values and attitudes expected of professional nurses and BSN graduates.

Evaluation of Competence in Graduate School:

Another major component of the follow-up study pertains to preparation for and performance in graduate school. In this sample, 11 RC graduates already had completed a masters degree and 42 others were enrolled. These 53 graduates identified MSN faculty members familiar with their performance and 41 (77%) of them returned usable surveys.

Graduate and faculty respondents were asked to rate the RC graduates' preparation for masters study. The majority of both groups rated graduates as equally or better prepared than those from other programs in all six areas identified. Faculty considered graduates especially better prepared to study independently (64%). Among MSN faculty members, 30% reported that the clinical competence of RC graduates was better than their peers; 37% reported their specialty competence was better; and 20% reported that their research knowledge was better.

Performance in graduate school:

Faculty and graduates were asked to respond to 10 facets associated with graduate work. For purposes of this presentation these items have been combined into 4 categories. Percentages summarize faculty and RC graduate responses in relation to the performance of those from other BSN programs.

Table 2 summarizes the results. A review of data in the faculty rows indicates the marked contrast between the " % Better" and the " % Lower" columns for each of the four behavior areas. When the faculty and graduate percentages for each behavior are compared, both groups expressed remarkably similar opinions, and placed RC graduates in the most favorable category. The most significant observation in this table is that nearly half of the MSN faculty members reported that RC graduates performed better than their peers in all four of the following behavior clusters:

Table 2

Faculty and Graduates' Ratings of RCD Graduates' Performance in Graduate School as Compared to Peers

	Better		Same		Lower		No Response/ Cannot Evaluate	
	n	%	n	%	n	%	n	%
Nursing Theory Courses								
Faculty	19	46	6	15	3	7	13	32
Graduates	23	43	20	38	6	11	4	8
Independent Study								
Faculty	19	46	6	15	1	2	15	37
Graduates	43	81	8	15	0	0	2	4
Interactive Participation[a]								
Faculty	19	46	9	22	2	4	11	27
Graduates	27	51	20	38	2	4	4	8
Writing and Research Skills[a]								
Faculty	19	46	5	12	5	12	12	29
Graduates	23	43	19	36	5	9	6	11

NOTE: Faculty percentages are based on 41 faculty who rated a graduate. Graduate percentages are based on 53 graduate respondents who are currently enrolled in or have completed MSN programs.

[a] These measures are composites of several items.

nursing theory/content courses,
independent study,
interactive participation (groups, seminars, presentations)
writing and research skills.

These findings further support the validity and reliability of the instruments and the achievement of behaviors associated with professionalism of BSN graduates.

Faculty and RC graduates also were asked to respond to 19 behaviors deemed important for successful masters' study and to indicate whether the behavior was Very Characteristic, Characteristic, Somewhat Characteristic, or Not Characteristic of the RC graduate in relation to peers. The behaviors singled out as most characteristic of RC graduates are listed below:

pursued unassigned readings
considered new ideas objectively
articulated ideas and defended positions
wrote papers competently
analyzed data with skill
open to criticism
synthesized resource materials

The survey also asked graduates to rate themselves on 10 personality characteristics, using a semantic differential 5-point scale. The following traits, which are pertinent to professionalization, were rated as 3.5 or higher: Independent, assertive, questioning, friendly, optimistic, determined and idealistic.

Summary

The findings of this study are consistent with others we have conducted over the past decade. Those nurses who are successful as distance learners in the RC external degree program have characteristics associated with advanced competence, autonomy, motivation and commitment to career advancement and other traits associated with professionalism.

The most compelling evidence that graduates of an assessment program is found in the ultimate outcomes of demonstrated competence in the real world of work and graduate study following graduation. Confidence in the quality of the RC assessment process and its graduates is supported by the quality and quantity of the evidence provided through follow-up studies of the graduates by those most familiar with their work one or more years following graduation. The analysis confirms that the performance examinations work effectively and that the graduates are competent in areas required for professional practice and performance in graduate school.

It is not too surprising that experienced nurses, who are determined, independent and assertive, are able to complete a degree program. It is noteworthy, but no longer unusual, that they can learn the required behaviors, even those associated with professionalization, externally to the institution awarding the degree. The required dimensions of practice can be identified and their achievement can be documented through high fidelity cognitive and performance examinations. The critical factors relate to how well the nontraditional and distance learning programs are designed, and how well the content and process components conform to psychometric principles and practices. Our research demonstrates the effectiveness of such self-directed programs when principles of adult learning, competency-based education and objective assessment are fully integrated and quality controls are an integral part of the process.

Future research includes the relationship of competence and distance learning to such factors as: styles of learning, use of human and material resources, learning support systems, and professional contributions. We welcome research opportunities for regional and national comparative studies.

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THE DESIGN AND USE OF ACTUAL AND SIMULATION PERFORMANCE EXAMINATIONS IN NURSING

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Objective clinical performance assessment has become an increasingly relevant topic for discussion and research as leaders in education, the professions and society realize its relationship to competence and quality control. Grant and Associates (1979) provide a valuable resource on competence-based education, the reforms it requires for faculty, students and institutions, and objective assessment as the natural byproduct of this educational approach. Grant states: "While the impact on students is considerable, competence-based education is essentially a faculty reform. It goes to the root of the relationship between faculty and students and requires faculty members to rethink their role" (p.13). In the same volume, Elbow writes to teachers: "The very involvement in a competence approach heightens your conscious analysis of your own teaching behavior: 'What am I really trying to teach? What would that competence look like in a person who successfully learned it? How could I distinguish a person who has learned it from one who hasn't?'" (p.117).

These perspectives were used in developing assessment instruments in nursing by the Regents external program during the past 15 years (Lenburg 1978, 1979 and 1983). They also can be applied directly to assessment instruments in conventional programs as demonstrated, for example, in Mitchell's (1982) work. The recent emphasis on assessment of abilities and outcomes in nursing education, however, is related to declining and changing enrollment patterns and economics, which has accelerated the development of programs designed for adult learners, minority and disadvantaged groups, and other types of educational mobility and nontraditional opportunities. Such programs, which typically allow more flexibility and diversity, must incorporate objective assessment of competence; both require the application of principles of competency-based and adult education. These changes in education are prompting much more use of objective quality control measures. In many cases, assessment of competence is no longer an option, it is legislated. These are significant reforms that have direct application to nursing.

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The University of the State of New York (USNY) Regents College (formerly the External Degree Program) offers the only existing assessment nursing programs, with associate and baccalaureate degree options, developed entirely with funds totaling $3.5 million from the Kellogg Foundation and student fees. It serves a national and international nursing student body of nearly 7,000 individuals. The typical nursing student is 36 years old, works full time, has children, has 10 years of experience in nursing at some level, and wants to advance in the career of nursing.

To put the performance examinations in context, the BSN program requires 72 credits in general education and 48 in the nursing component. The 20 credits of theoretical content is documented through 5 written nursing examinations and the 28 credits of clinical component are documented through the 4 performance examinations. The written and performance examinations were developed by the nursing faculty and staff of Regents College (RC). The performance assessment instruments have been used to document the competencies of more than 5,000 nurses who have completed a degree from RC. This national database is impressive and includes approximately 30,000 actual patient care situations and approximately 2,500 health assessments and client teaching situations by students. These testing episodes are based on one-to-one observation and strict protocols for selection of patients and documentation of performance. In addition, more than 36,000 videomodule examinations have been administered, each one evaluated by two independent examiners using the required criterion referenced scoring manuals.

Examiners for all of the performance examinations are required to use designated forms and protocols to insure that data are complete and recorded in a written, consistent format conducive to research as well as legal purposes. All of the 250 examiners, who function at the 15 clinical test sites associated with RC's national network of Regional Performance Assessment Centers, have completed the comprehensive training program designed and conducted by the RC nursing staff and faculty. The centers are located in NY, NJ, GA, WI and CA.

Philosophy and Framework for Performance Examinations

The concept of clinical examination as used in the RC nursing program differs fundamentally from clinical evaluation used in conventional programs. Besides having a strong knowledge base in adult learning theories, to develop successful performance examinations faculty need to make a transition in fundamental beliefs about and practices in teaching and evaluation. Therefore, it is important to review five contrasting perspectives about evaluation and to identify 10 concepts essential for objective performance assessment. Each contrasting perspective is presented as a continuum, to illustrate the differences in beliefs and how they influence assessment as well as teaching and learning.

Teaching vs Learning. It does not matter who teaches or where learning takes place. Adults are responsible for their own learning and teachers are responsible for promoting learning by specifying what is to be learned, identifying learning resources, and providing the means for objective assessment.

Theory vs Performance. Written examinations about clinical phenomena and nursing activities test what a learner knows, but little about the ability to apply this knowledge. Performance examinations test the complex integration of cognitive, affective and psychomotor skills necessary for technical practice abilities critical thinking and decision making. Separating the two types of assessment is essential to maximize the use of each approach.

Evaluation vs Examination. Lenburg (1979) points out that traditionally faculty have applied the terms examination to written tests but evaluation to clinical experience. Clinical evaluation usually is diagnostic and formative and is almost always subjective and inconsistent. Objective clinical performance examinations can be designed using psychometric principles, and applied with confidence.

Assumption vs Documentation. Clinical evaluation usually means observing partial performance, for some students, some of the time, thus forcing faculty to make assumptions. During a clinical examination, however, direct and continuous observation of the student is used to validate that specified critical elements are met, thereby documenting competence.

Completion vs Competence. Using performance examinations enables faculty to know more than just that the student has passed written examinations, was evaluated clinically, and therefore completed the requirements. Performance examinations provide confidence that the student not only has completed the program but also is competent in practice.

Although making these philosophical shifts is often difficult, the real challenge lies in the work of operationalizing 10 concepts of assessment. In Lenburg's model the concept of clinical examination has 9 associated concepts that focus on organizing content, the characteristics, and the structure and process required for implementation.

Evaluation breaks down so often because the student needs, or seems to need, instruction and when teachers respond with assistance, objective assessment is nullified. Because no teaching is permitted during clinical examination, faculty can document more objectively the truth of the learner's competence.

Content is organized and defined by two concepts: Areas of care or Dimensions of Practice, and critical elements. Areas of Care are not procedures; they are discrete clusters of cognitive, affective and psychomotor skills that form competencies.

Critical element, is a single, discrete, observable behavior mandatory for a particular competency. These statements specifically define competence and Pass/Fail behaviors.

Performance examinations do not negate faculty judgment but rather minimize personal opinions while observing performance. Objectivity is increased by having precise instruments and holding faculty accountable for using them.

As with written tests, sampling the array of competencies is necessary because total content testing is impossible. To pass, students need to learn all of competencies because they do not know in advance which specific areas will be tested.

The level of acceptability specifies the error limits that can be tolerated for safe performance. This controls value judgments and unreasonable faculty expectations. It defines how good is "good enough" for the purpose and designated level.

Patient care situations vary in complexity and thus rules for comparability of testing episodes are mandatory. This prevents inequity and ensures that each student has a situation that is fair and of equivalent complexity.

Students and faculty complain about the lack of consistency in evaluation. All faculty are required to follow preestablished specific protocols to maintain test quality and reliability.

Rigid rules make clinical examinations impossible; specific methods to control flexibility are essential, especially when assessment is implemented in real clinical settings.

Spontaneous, diverse decisions made by faculty may nullify objectivity, validity and reliability as well as open up the potential for lawsuits. This can be controlled by using predetermined systematized conditions during the examination.

Continuum of Performance Examination Model

The design of instruments to assess competence is conceived along a continuum from those that are administered in the totally real environment to those that use total simulation. The four performance examinations developed and used by RC's BSN program are examples. The rationale for selecting and designing a particular model is based on multiple and complex factors.

Each type has advantages and disadvantages. Decisions about which to use are dependent on the content to be evaluated and considerations for such factors as: constraints in the testing environment, complexity of behaviors to be measured, cost of development and administration, legal and ethical constraints, and the potential success of the instrument to meet its purpose.

The Clinical Performance in Nursing Examination (CPNE) illustrates the totally actual clinical model. It provides the best opportunity to determine the truth of the student's competence in the real environment. This examination assesses competencies required to apply nursing process in direct care to hospitalized adult and child patients; it requires 2 1\2 days and is worth 8 credits.

The Health Assessment Performance Examination (HAPE) and Teaching Performance Examination (TPE) are quasi-actual examinations that use a real environment and real people, but have additional controls for testing purposes. Clients are paid subjects who are programmed to play the roles in compliance with prescribed conditions. These two examinations, administered back-to-back, assess two sets of competencies: 1) conducting a comprehensive history and physical examination and, 2) client teaching. This requires one day and is worth 8 credits.

The laboratory portion of the CPNE also is a simulation model in which students perform the behaviors but use mannequins, with one-to-one direct observation by the clinical examiner.

The Professional Performance Examination (PPE) uses a total simulation model, through the medium of videotaped clinical situations. This allows maximum control of the variables and is most suitable for assessing complex behaviors and performance ability in clinical practice environments that are inappropriate or inaccessible for testing purposes. The PPE documents the student's ability to synthesize principles and data from many domains and to apply them in the dimensions of collaboration, leadership, management of client care, research process in practice, clinical decision making, and relating with others. This examination requires 2 1/2 days and is worth 12 credits.

General Considerations, Problems and Benefits

Implementing an objective performance assessment system is an important and formidable undertaking. The system can fulfill its purpose without major disasters if nursing and college administrators, faculty, students and clinical agency staff have an understanding of the philosophy, concepts and methods required, and a commitment to adopting it. Other groups also may be involved, such as advisory boards or special committees. They need to know the benefits as well as the expected problems associated with such a major curriculum change. Faculty and administrators need to schedule time for planning, developing instruments, procedures and study guides, orienting various groups, pilot testing and revising materials before implementation. Administrators need to realize the expenses associated with planning, development, consultation, pilot testing, and orientation for initial and ongoing periods. Faculty need extensive preparation for the role of examiner, which is radically different from that of teacher; they also need to realize that time must be planned into the academic schedule for clinical examinations, which is separate from instructional time.

Some of the major activities required during the planning and implementation periods are outlined below.

1. Secure approval and support at all pertinent levels in the institution: philosophical, educational and administrative.

2. Clarify the purposes of objective assessment: Is it for selection, promotion or continuance in the program, or for learning and development?

3. Identify the broad areas or dimensions to be assessed, such as: technical aspects of nursing care, or dimensions of clinical practice, such as assessment, planning, decision making, communications with others, research process, or management of clients or systems.

4. Specify the performance outcomes expected of the learner at the conclusion of the learning period. These statements are restricted specifically to the purposes and areas identified. Some common problems are that statements are too global, stray into other topics, include too much and are not objectively measurable.

5. State the explicit critical elements (specific criteria) to be used to judge clinical competence. The critical elements approach requires that statements be written using words specifically and deliberately to identify acceptable behaviors; they are the definitions of competence and students are required to meet them with 100% accuracy.

6. Give students the examination study guide (content and process) at the beginning of the learning period; it is intended to help them to become competent and to be successful in the areas of practice to be examined.

7. Identify the array of learning opportunities to guide students to prepare for the clinical examination; these are included in the study guide and promote flexibility and accountability for learning.

8. Standardize the procedures of administration by answering specific questions such as: Who is to be assessed and by whom? How, where and when will the assessment be conducted? Why is the examination being conducted as it is? What specific decision rules will be used to handle anticipated and unanticipated problems in the performance of students, faculty examiners, and participating clients?

9. Plan an initial period of major reorientation and preparation for the faculty who will function as clinical examiners, and then implement a specific plan for quality control to achieve and maintain validity and reliability. Students and clinical agency staff also require initial and periodic orientations.

10. Determine policies and procedures for handling the consequences of passing and failing the examination or parts of it, for students, faculty and the program as a whole.

Benefits and Problems for Different Models

In the Actual Clinical Model, as illustrated by the CPNE, students perform the required behaviors in a real setting with real patients. The greatest benefit is the opportunity to observe and document the student's actual competence in a true-to-life situation, which includes as much content and complexity as designed by the faculty. The problems are multiple and can be categorized for the clinical setting, faculty examiners and students. In the clinical setting some examples are: the potential for frequent and unanticipated changes in the patient's condition and the clinical environment; unplanned discharge; inadequate availability of the kinds and number of areas of care or patients who meet the specified criteria for selection required for administration of the examination at the time they are needed; misunderstanding or lack of cooperation from patients, family, physicians, and staff; potential legal issues. The Actual Clinical Model is used only when the competence to be assessed requires the complex reality of the clinical settings.

Problems of faculty relate to the violation of various specified criteria essential to the examination, such as: teaching instead of observing performance; improper selection of patients (resulting in lack of comparability); inconsistency in applying the decision rules; and adding, deleting or modifying critical elements. They also experience subjective and emotional responses to failure situations and to decisions that are reversed by the examination coordinator or faculty appeal panel. Fatigue and inadequate attention to the student's performance or the patient's needs also pose problems for some examiners.

Students may be highly anxious before and during the examination and angry and disbelieving when they fail. Until the system has been experienced by the first group of students they often do not realize the extent of accountability for their performance and the consequences of failure, thus they may not prepare adequately. Students and faculty who have never experienced a criterion-referenced clinical examination find it hard to accept the requirement for 100% accuracy of specified critical elements, which is an essential aspect of this approach.

The Quasi-actual Model is an important variation that reduces many of the clinical problems; it is illustrated by the Health Assessment and Teaching Performance Examinations (HAPE and TPE). The use of programmed clients (paid individuals to act the client role) promotes comparability of test episodes, availability and adequacy of clients, controlled clinical environments, and increases the efficiency and cost effectiveness of the process. Faculty have fewer of the problems mentioned above but they require similar protocols for consistency and quality control. Students have fewer problems as the setting and content are less complex.

The Total Simulation Model is illustrated by the PPE, which uses videotaped clinical situations. This model has major advantages of insuring comparability of test episodes and sufficient opportunities to assess performance in complex or otherwise inaccessible clinical situations. With total simulation all students receive the same visual and auditory cues, have the same time allotment, use the same conditions and are held accountable for the same criteria, even though the clinical competence being documented requires multiple and diverse settings and clients, and a high degree of synthesis of content.

This model has additional problems related to the production of high fidelity videotapes. The written and video materials must be developed in meticulous detail because their purpose is examination not instruction. The content and preparation of scripts is especially critical and time consuming. The production of the tapes requires a variety of technical experts, including directors, producers, and cinematographers; the actors, whether amateurs or professionals, require considerable time and preparation. In the post-production period studio experts working with faculty content experts, to convert the raw tape into the examination modules. During this period narration, graphics, the scroll of critical elements and break points for students to respond to the situations are added.

Other problems include: 1) implementing a plan for judging the students' competence as recorded on the complex, controlled, essay-type response forms; 2) developing scoring manuals that identify acceptable and unacceptable responses to be used by the examiners; and 3) as with the other examinations, designing and implementing a system to maximize consistency and quality control in the assessment process.

This array of types of performance examinations makes it possible for the faculty to determine which competencies to document, where and how the student will be examined, and which method is most appropriate and administratively feasible. These decisions are based on a detailed analysis of the multiple and complex factors indicated above. Whether the students' competence is documented by simulation or actual clinical examinations, the faculty who make the decisions are held accountable for applying the concepts, decision rules and protocols. Implementing an objective performance examination is difficult for the very reasons it is so beneficial and essential, namely it requires objectivity and consistency in faculty evaluation procedures, comparability and fairness of testing episodes for students, and maintaining the preestablished level of acceptability that defines and documents competence. The administrator or faculty designated as responsible for administering the examination system must be vigilant, and insist that quality control measures be applied consistently. The student appeal process is an essential and valuable part of the objective assessment system.

Summary

It is imperative that design of content and process components conform to psychometric principles and practices. The instruments used to assess competence must be comprehensive, complex, realistic, and rigorous enough to insure confidence in the ability of the person who completes them. The evidence that performance examinations have satisfied their purpose is found in the outcomes, ie, in the demonstrated ability of the graduates to implement the desired or expected behaviors in the real world following degree completion, in the work place and in continued schooling at the graduate level. Over the past 10 years, hundreds of those who have worked with RC graduates consistently have evaluated their work to be as good as or better than that of other graduates.

After completing her dissertation on three of RC's nursing performance examinations, Lieber (1987) stated in a report of her experience: "During the process of conducting this research I became painfully aware that although I wrote students' clinical evaluations I never really evaluated their performance. What I did constantly was clinical instruction, not evaluation. This awareness prompted me to do some very deep educational soul-searching and to shift some of my own personal philosophical perspectives. What I now realize is that performance examinations, constructed using concepts and perspectives developed by the RC nursing faculty and staff, are very different from those evaluation procedures most of us use including myself. I also realize that it is educationally dangerous to adopt parts of these models and not the whole."

Kirkwood, former president of the Middle States Association,is quoted by Cross and McCartan in the 1984 ASHE-ERIC REPORTS on Adult Learning as saying: "Unfortunately, on most campuses assessing outcomes has not been tried and found difficult; rather it has been found difficult and seldom tried" (p.74). Our experience demonstrates that complex actual and simulation performance examinations can be used successfully even with large groups of students who are dispersed nationally. Although difficult and costly, this is a needed reform. A commitment to the development and use of objective performance examinations in a necessary component of education today; it also is a challenge the nursing profession can and must meet. The diversity inherent in educational mobility programs associated with nontraditional education requires both flexibility and accountability; objective performance assessment is an essential component of this system of reform.

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AN EXPERIMENTAL EVALUATION OF THE COGNITIVE AND EXPERIENTIAL LEARNING METHODOLOGIES

by

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ABSTRACT

Studies have shown the benefits to be gained from utilizing an experiential versus a purely cognitive learning methodology in terms of students' attitudes without a loss in the cognitive base. This paper reports on the results of a large scale study that attempted to compare an inherently experiential course in terms of both student attitudes and objectively measured cognitive learning, against the same course enriched with a simulation game, as well as other similiar courses. In addition, the results indicate that the desirable effects of an experiential course design are maintained, and, indeed, enhanced when a game is introduced to complement the experiential context. Given previous findings on the overall desirability of an experiential-cognitive design where the cognitive performance of the students is not sacrificed by making the course interesting and pleasant to them, this study indicates that there is a potential for further enhancing the students' attitudes for a given level and quality of attitudes, by marrying an experiential course design with a computer-based simulation game.

AN EXPERIMENTAL EVALUATION OF THE COGNITIVE AND EXPERIENTIAL LEARNING METHODOLOGIES

Other studies (Hoover and Whitehead, 1979) have shown the benefits to be gained from utilizing an experiential vs. a purely cognitive learning methodology in terms of student attitudes and no loss in the cognitive data base. In the present study, an inherently experiential course is compared in terms of student attitudes with the same course when a simulation game is added, and other courses in a College of Business. In effect, we are trying to determine if a good thing, i.e., experiential learning, can become even better when enriched with a computer business simulation game.

The Design

Course "BA-XOB" in the College of Business of a large Mid-Western State University is an experiential course in Organizational Behavior (O.B.). It is assumed that the cognitive data base for O.B. concepts, theories, and practices is acquired in "BA-XOB" a traditional O.B. course, which is a prerequisite for "BA-COB." Given previous empirical results (Hoover and Whitehead, 1979), we would expect that students in the experiential course would have better attitudes for that course than for the other business courses that they have taken collectively. This was our first hypothesis; more hypotheses were formulated, and they are discussed below. The study involved four sections of BA-XOB offered during the first and second Summer Sessions, i.e., two sections during each session. During the first Summer Session, the study involved two professors, while during the second Summer Session only one professor taught both sections (he was also one of the two professors who had taught one of the sections in the first Summer Session). Each class involved approximately 20 students, and they were basically junior and senior business majors.

Restating the hypotheses:

Hypothesis One: Students will not exhibit significant attitudinal differences between the experiential course and other business courses.

Hypothesis Two: Students will not exhibit significant differences in attitudes between the experiential course enriched with a simulation game and the experiential course without the game.

Hypothesis Three: Students will not exhibit significant differences in attitudes between the experiential course enriched with a simulation game and other traditional (i.e., cognitive) business courses.

Hypothesis Four: There will be no significant differences between the students' attitudes in the two experiential-gaming courses taught by the two different professors.

Hypothesis One was designed to duplicate previous empirical findings (Hoover and Whitehead, 1979) and also to test the reliability of the proposition that students develop better attitudes toward experiential courses. The hypothesis was expected to be rejected.

Hypothesis Two was designed to test the effect of the innovation, i.e., the introduction of the computer simulation game. It was expected to be rejected.

Hypothesis Three is similar to Hypothesis Two above, although less powerful. On the basis of previous knowledge and findings, this hypothesis was almost certain to be rejected.

Hypothesis Four basically respresented an internal control and it attempted to establish the generalizability of the findings, i.e., whatever the results may be, they are not "professor-specific." It was expected that it would be accepted.

During the first Summer Session, the computer simulation game was introduced at the mid-point of the two courses taught by the two professors, and this was done for experimental design purposes. During the second Summer Session, the game was introduced at the beginning of the two courses taught by the same professor.

The students' attitudes toward the various aspects of the experiential, the game-enriched experiential, and other business courses, were measured by a twenty-item questionnaire that, at different phases of the experiment, was administered at the beginning, mid-point, or end-point of the course. The instrument is presented in Appendix A.

Results

Table 1 presents the summarized attitudinal results of the comparison between the experiential course and other Business Administration courses taken at the mid-point (i.e., before the introduction of the game) of the first Summer Session sections. As expected, the results indicated that students, generally, felt significantly more positive about experiential courses than about traditional cognitive courses. These results dictate the rejection of Hypothesis One.

TABLE 1

Comparison of Mid-point Attitudinal Mean Scores between experiential and other business courses, first Summer Session[a,b]

(t-values)

Section One	Section Two
15 items negative	16 items negative
5 items zero	4 items zero

[a] Level of significance, $p \leq .05$

[b] Positive = significantly better attitudes for other business courses;
Negative = significantly better attitudes for the experiential course;
Zero = no statistically significant difference.

Table 2 presents the summarized attitudinal results of the comparison between the experiential course (mid-point), and the experiential course enriched with the game (end-point). These results indicate limited support for the idea that the introduction of a computer simulation game can "make a good thing better." The areas where the students' attitudes from both sections improved are items 1, 2, 4, and 20 (please see Appendix A). In addition, statistically significant differences were indicated for item 17 for the second section. These results enable us to reject Hypothesis Two.

TABLE 2

Comparison of "Experiential" Mid-point and "Experiential + Game" End-point Attitudinal Mean Scores.[a,b]

(t-values)

Section One	Section One
5 items negative	6 items negative
15 items zero	14 items zero

[a] Level of significance, $p \leq .05$

[b] Positive = significantly better attitudes for other business courses;
Negative = significantly better attitudes for the experiential course;
Zero = no statistically significant difference.

Table 3 presents the summarized attitudinal results of the comparison between the "experiential plus game" course (end-point), and other business courses (end-point). The differences are significant for 17 of the 20 categories and indicate that students felt much better about the experiential plus game course than for their other business courses. Accordingly, hypothesis Three was easily rejected.

TABLE 3

Comparison of "Experiental + Game" (end-point) and other Business Courses (end-point) Attitudinal Mean Scores: Summary of significant Mean Differences by item[a]

Section	Number of "Experiential+Game" Means Significantly Higher from other Business Courses	Number of "Experiential+Game" Means not significantly different from other Business Courses
One	17	3
Two	17	3

[a] Level of Significance, $p \leq .05$

The students' attitudes in the two sections in the first Summer Section were compared at the beginning, midpoint, and endpoint of the course. Only one statistically significant difference was observed at the beginning (item number 10), one statistically significant difference at the midpoint (item number 20), and no differences at the endpoint. These findings indicate that the pool of subjects was essentially the same at the beginning, and the two professors did not produce a differential impact in their students. Therefore, Hypothesis Four was accepted, and this signifies that the results were not confounded by the professors.

Finally, Table 4 summarizes the results of the second Summer Session, when both sections were taught by the same professor, and, in addition, the simulation game was introduced at the beginning of the course (rather than at the midpoint as was the case during the first Summer Session). The results paralleled those presented in Table 3 and provide additional support for the rejection of Hypothesis Three.

TABLE 4

Comparison of "Experiential plus Game" from the beginning (end-point) and other Business Courses (end-point) Attitudinal Mean Scores.[a,b]

(t-values)

Section	Negative	Positive	Zero
One	16	0	4
Two	15	0	5

a Level of significance, $p \leq .05$

b Positive = significantly better attitudes for other business courses;
Negative = significantly better attitudes for the experiential course;
Zero = no statistically significant difference.

Discussion

This study complements many earlier studies on the same issues. We have found incremental support for the idea that experiential courses improve the students' attitudes as compared to traditional cognitive courses. In addition, the results seem to indicate that the desirable effects of an experiential course design are maintained, and, indeed, enhanced when a computer simulation game is introduced to complement the experiential context. Given previous findings on the overall desirabibility of an experiential-cognitive design where the cognitive performance of the students is not sacrified by making the course interesting and pleasant to them (Hooover and Whitehead, 1979), this study seems to indicate that there is a potential for further enhancing the students' attitudes for a given level of cognitive learning, or, alternatively, increasing cognitive learning for a given level and quality of attitudes, by marrying an experiential course design with a game.

Appendix A.: HOW I EVALUATE THIS COURSE

Listed below are sets of items. Place in the box at the left the number on the scale which best decribes your feelings about this course. Please indicate only one number for each set. This course was:

________	1.	Interesting	7 6 5 4 3 2 1	1.	Boring
________	2.	Satisfying	7 6 5 4 3 2 1	2.	Dissatisfying
________	3.	Enjoyable	7 6 5 4 3 2 1	3.	Unenjoyable
________	4.	Informative, packed with pertinent knowledge	7 6 5 4 3 2 1	4.	Uninformative, barren without useful knowledge
________	5.	Applicable to the "real world"	7 6 5 4 3 2 1	5.	Unrealistic and nonapplicable
________	6.	Good preparation	7 6 5 4 3 2 1	6.	Bad preparation
________	7.	Learning processes were simplified	7 6 5 4 3 2 1	7.	Learning processes were too complex
________	8.	Helped to develop my managerial skills	7 6 5 4 3 2 1	8.	Did not develop my skills
________	9.	The learning process was pertinent to my self development	7 6 5 4 3 2 1	9.	The learning process was irrelevant to my self - development
________	10.	I felt I could express myself easily and freely	7 6 5 4 3 2 1	10.	My self-expression was difficult and discouraged
________	11.	Labs assisted in integrating course	7 6 5 4 3 2 1	11.	Labs confused students
________	12.	I felt the course challenged me	7 6 5 4 3 2 1	12.	I felt the course did not challenge me
________	13.	I felt active and "involved"	7 6 5 4 3 2 1	13.	I felt passive and "aloof"

_______	14.	This course helped me develop my personal philosophy	7 6 5 4 3 2 1	14.	This course did not help me develop my personal philosophy
_______	15.	I felt the course required me to exercise a great deal of initiative	7 6 5 4 3 2 1	15.	I felt the course required me to exercise very little initiative
_______	16.	I felt that I learned a great deal in class	7 6 5 4 3 2 1	16.	I felt I did not learn a lot in class
_______	17.	The exams were very helpful	7 6 5 4 3 2 1	17.	The exams were not helpful
_______	18.	I felt the course required me to excercise independent judgement in evaluating textbook theories	7 6 5 4 3 2 1	18.	I felt the course did not require me to exercise independent judgement in evaluating textbook theories
_______	19.	The instructors met the objectives they had set for their course	7 6 5 4 3 2 1	19.	The instructors did not meet the objectives they had set
_______	20.	I am glad I took the course	7 6 5 4 3 2 1	20.	I am sorry I have taken the course

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EDUCATION FOR YOUR FUTURE: A JOINT MARKETING PROGRAM IN CONTINUING EDUCATION

Author: Peggy Calestro

This paper describes an innovative, interinstitutional program which markets continuing education to nontraditional students in central Ohio.

Background

EDUCATION FOR YOUR FUTURE is a cooperative effort of eight colleges and universities in Franklin County, Ohio: Capital University, The Columbus College of Art and Design, Columbus State Community College, DeVry Institute of Technology, Franklin University, Ohio Dominican College, The Ohio State University, and Otterbein College.

These eight colleges and universities are members of the Higher Education Council of Columbus (HECC) and comprise a relatively-unique mix of one proprietary, two public, and five private institutions.

The Higher Education Council of Columbus has two goals: to promote communication and cooperation among its member institutions, and to promote linkages between higher education and other sectors of the central Ohio community.

To facilitate the first goal are seven standing committees and several *ad hoc* committees which meet under the auspices of HECC, each with its own agenda, programs, and in some cases, funded projects.

One of the most active and visionary of these committees is composed of the Continuing Education Directors of the HECC member institutions. In fact, it was their interest in offering cooperative telecourses in the late 1970s which led to the formation of the Higher Education Cable Council, whose name was later changed to the Higher Education Council of Columbus.

This committee sponsored on-site courses for employees of six companies in northern Franklin County in the early 1980s, a project funded by a grant from the U. S. Department of Education's Fund for the Improvement of Postsecondary Education.

Their history of collaboration greatly facilitated the development of a Joint Marketing Program in Continuing Education.

Identifying the Problem

Because of the many institutional differences among HECC's eight member colleges and universities, and in light of their natural competition for

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Peggy Calestro is Executive Director of the Higher Education Council of Columbus; c/o The Columbus College of Art and Design; 47 N. Washington Avenue; Columbus, Ohio; 43215-3875; (614) 224-9101 students, public and private support, and community recognition, the work of HECC committees tends to focus on solving problems of mutual concern, on generic, rather than institution-specific, issues.

Several years ago, the Continuing Education Directors began to discuss their shared difficulties in attracting adult, nontraditional students. Although some of these problems occurred within the institution (e.g., enrollment procedures for nontraditional students were decentralized and housed in a number of different locations, making access formidable; telephone inquiries to campus switchboards often resulted in referrals to the wrong office), the HECC Continuing Education Directors were able to agree on four major problems facing each of their institution's efforts to recruit nontraditional students.

1. Many adults avoid higher education because of outdated perceptions.

   The combined experience of Continuing Education Directors from eight very diverse institutions revealed that many prospective adult students were reluctant to return to the classroom because they had inaccurate perceptions of colleges and universities.

   These perceived "barriers" to continuing education included: "I'm too old;" "I can't meet academic expectations;" "I have too many professional and family responsibilities to find time for education;" "I don't know what to study;" "my family or employer might not be supportive;" "courses are not offered at times and locations convenient for the working adult;" "I can't afford it."

   As those of you in continuing education are well aware, nearly fifty percent of all college students today are over the age of twenty-five. Moreover, significant energy and resources in higher education have been directed toward facilitating reentry of the adult student and toward obviating the problems expressed above.

   The problem remained, however, that many adults in Franklin County were unaware of these dramatic changes in higher education and continued to avoid college because of outdated perceptions.

A second problem in attracting the nontraditional student focused on the student as consumer:

2. Comprehensive and comparative information on educational opportunities for adults is difficult to obtain.

   Ironically, as colleges and universities expanded their programs for adult learners, obtaining comprehensive information about these programs had become more complex and confusing for the prospective student.

In some cases, corporate employers were contacted to develop company-sponsored programs for a particular group of employees, rather than to provide information on numerous programs to all employees.

It was generally through the media that the majority of prospective, nontraditional students obtained information about continuing education. This created serious gaps in consumer information.

First, not all available adult programs were marketed. Second, some institutions had insufficient funds to launch comprehensive marketing programs. Third, the prospective student had to pursue this information aggressively, institution by institution, to obtain an accurate and comparative picture of the many programs available in continuing education in Franklin County.

What was clearly needed was a vehicle for informing adults of the wide variety of educational opportunities and assistance in how to obtain and compare information about these opportunities.

3. Lack of corporate executives' time to understand and to explain available programs in continuing education to corporate employees.

   Committee members expressed difficulties in relying on corporate executives in human resources and training to provide information on continuing education to their employees. These corporate representatives were often too busy to meet with continuing education staff, and it was difficult for them to assimilate the many types of programs available to adults and to explain them to their employees.

   The result was frequently that corporate executives preferred to respond to specific requests from their employees, rather than to take a more active role in promoting continuing education among their employees.

The HECC Continuing Education Directors decided that the tasks of informing employees of educational opportunities and of promoting the concept of continuing education should not be left solely to corporate executives in human resources and training.

4. Underutilization of Tuition Assistance Funds

   Although these funds varied from company to company, most Tuition Assistance Funds were established to

> reimburse employees for successful completion of courses at area colleges and universities.
>
> The Ohio Board of Regents had studied the use of corporate Tuition Assistance Funds, and their data revealed a startling underutilization of these funds. The national average for use of available Tuition Assistance Funds in 1984 was 4%; Ohio's was only slightly higher. Of the available 100% of Tuition Assistance Funds in Ohio, over 90% remained untapped each year.
>
> The reasons for this were probably several: corporate employees lacked the confidence or information needed to go to college; corporate employees were not aware of Tuition Assistance Funds; some companies had restrictive policies for obtaining reimbursement.
>
> The fact remained that these available funds were not being taken advantage of in Ohio by the majority of corporate employees.

The HECC Continuing Education Directors agreed that a company-hosted, on-site presentation on higher education to corporate employees would provide tangible corporate endorsement for continuing education and theoretically would result in increased use of corporate Tuition Assistance Funds.

Developing the Program

Identifying, clarifying, and agreeing upon the aforementioned problems took the HECC Continuing Education Directors about four meetings (four months). During this process, there began to emerge a sense of the type of program which could address these concerns: a program which provided both generic and specific information on continuing education; had an audiovisual component; and included written information as well for the prospective student to review at a later time. There was also agreement that this program should be presented by a representative from continuing or higher education, and that part of the program should be interactive--soliciting reactions and questions from the audience.

The HECC Executive Director, who facilitated and convened these committee meetings, wrote several drafts of the project and its components. Each draft was revised and modified by the committee members over a period of several months.

Approximately six months after the idea of a joint marketing program in continuing education was introduced, the Continuing Education Directors Committee reached final agreement on the program, its components, and the target audience.

The committee unanimously endorsed the idea of a program which provided consumer-oriented information and answers to questions adults have about going to college. Information on the degrees, academic schedules, and services for nontraditional students offered by the HECC member institutions was also identified as a critical program component. The consensus was that the major thrust of the program should be to break down the perceived barriers adults have about going to college.

Finally, the committee agreed that the initial target audience for this program should be corporate employees whose companies offer Tuition Assistance Funds. Each Continuing Education Director and the HECC Executive Director offered to make presentations to at least two groups of corporate employees each year after the program was produced.

This was an important milestone in the committee's development of the project, for it signified the members' willingness to promote the concept of continuing education to prospective students and, of greater consequence, their willingess to market continuing education not just at their own institutions but at all eight HECC member institutions.

Funding the Program

Considering the major strides the HECC Continuing Education Directors had made in developing collaborative programs, it's not surprising that their first suggestion was to produce the joint marketing program themselves, using the resources of the eight HECC member institutions.

After all, within our institutions we had excellent script-writing capability, state-of-the-art audiovisual production facilities, and renowned graphic artists, all of which could be combined to produce a first-rate joint marketing program. Several meetings were devoted to discussing which institutions would be best suited for particular tasks and to determining an equitable distribution of the production workload.

The HECC Executive Director advised against a collaborative production effort, citing three major objections:

1. Given the busy schedules of campus administrators and staff, the project might take several years to complete;

2. A production which relied on the script from one institution, the graphics from another, and the audiovisual production from another could be fragmented and inconsistent, possibly compromising the quality of the program;

3. The expertise and objectivity that an outside consultant would bring to the production could help to ensure a persuasive, marketable product.

The HECC Executive Director offered to write a proposal for project funding to a local foundation, the Columbus Foundation. The production capabilities of the HECC member institutions would be used as an alternative if the proposal were not funded. The Continuing Education Directors supported that suggestion, and a proposal was submitted to the Columbus Foundation in November of 1984, requesting a grant of $23,738 to develop a Joint Marketing Program in Continuing Education.

The project had several features which made it particularly attractive to a local foundation. First, it represented a cooperative effort among local colleges and universities. Second, it advanced one of the foundation's goals: promoting education for residents of Columbus, Ohio. Third, the program's beneficiaries included three distinct groups: prospective adult students, the corporate sector, and the HECC member institutions.

The project received full funding in February of 1985 from the Columbus Foundation.

Producing the Program

Although the grant from the Columbus Foundation was made to the Higher Education Council of Columbus, the HECC Continuing Education Directors Committee supervised the entire project. The first decision the committee made was to select a professional firm to produce a slide/sound program, an accompanying Consumer Guide, and eight, one-page information sheets--one for each of the HECC member institutions--which described programs for nontraditional students.

The committee invited three media professionals to make presentations on the program. One had considerable experience in higher education--both as a professor and as a media consultant. The committee unanimously selected Sandra Nichols of The Nichols Marketing Group to produce its Joint Marketing Program.

The production phase of this project was perhaps the most difficult. It was important that all eight Continuing Education Directors assist in providing the basic content of the script, which they did by answering a questionnaire prepared by Nichols. The time from the initial draft of the questionnaire to the final approval of the script by all eight Continuing Education Directors was about six months--an especially time-consuming process because it coincided with summer vacations for many of the Continuing Education Directors.

The task of assembling the slides for the slide/sound program proved no less difficult. It was agreed beforehand that the slides would be generic, "college campus scenes," with no institutional identification visible. Several HECC member institutions had no such slides and needed to produce them; slides from others depicted outdated clothing and hairstyles and were inappropriate.

Although the accompanying written materials were easier to produce, the printing schedule was postponed several times because of changes in degrees offered by several institutions and a name change contemplated by one institution.

Escalating production costs for the slide/sound program forced a change to a single narrator, rather than different narrators from the nontraditional student populations on the HECC member campuses.

The name of the Joint Marketing Program in Continuing Education was changed to EDUCATION FOR YOUR FUTURE on the advice of our project consultant.

By December of 1985, the program was completed; a premier showing of EDUCATION FOR YOUR FUTURE was held in February of 1986.

Presenting the Program

During the preparation of the proposal to the Columbus Foundation, the Continuing Education Directors and HECC Executive Director contacted a dozen or so corporate directors of human resources, training and personnel for endorsement letters. All complied, expressing interest in the program and offering to host a presentation of the program when completed.

It was somewhat disheartening, then, when we recontacted these corporate endorsers to schedule presentations. Many deferred the presentation to a much later date, and several said it was no longer applicable to their companies or to their employees. Our unconfirmed suspicion was that some of these companies anticipated a surge of requests for Tuition Assistance Funds which might result from the EDUCATION FOR YOUR FUTURE presentation and decided that the company could not or did not want to incur this expense.

Nevertheless, the HECC Executive Director and committee members persuaded other companies and professional associations to sponsor presentations. The evaluations of these presentations by both employers and employees have been consistently excellent.

To date, the following organizations have hosted presentations of EDUCATION FOR YOUR FUTURE:

Social Security Administration
Blue Cross of Central Ohio
Gold Circle Stores
J C Penney Life Insurance Company
CompuServe
Administrative Management Society of Central Ohio
1986, 1987 Annual College Fair for State of Ohio Employees
Government Relations and Communications Committee, State
    Higher Education Executive Officers
Ohio Arts Council
Ohio Association of College Admissions Counselors
OSU Marion Campus Continuing Education Division
Ohio/Pennsylvania Higher Education Network
Nationwide Insurance Companies
Online Computer Library Center (OCLC)
National Guard of Ohio
Franklin County Mental Health Board
Ohio Coalition for Adult Learning
Ohio Continuing Higher Education Association
Ohio Department of Administrative Services
United Auto Workers Lodal 969 (Fisher Guide)
Center for New Directions
Worthington Business and Professional Women's Association
Summer Sessions Conference of NAASS
Greater Cincinnati Consortium of Colleges and Universities
The Huntington National Bank
Columbus Urban League

Several companies continue to request updated EDUCATION FOR YOUR FUTURE information packets, and one organization, Center for New Directions, includes an EDUCATION FOR YOUR FUTURE presentation in its regular programming for displaced homemakers.

The Greater Cincinnati Consortium of Colleges and Universities has submitted a proposal to the Greater Cincinnati Foundation for funds to produce its own EDUCATION FOR YOUR FUTURE program. Recently, HECC received notice that the Ohio-Pennsylvania Higher Education Network wanted to use our script and Consumer Guide, into which they would substitute their own slides and information sheets. Currently, HECC is negotiating with the Ohio Department of Administrative Services to present EDUCATION FOR YOUR FUTURE to all state employees working in Columbus, whose departments or divisions have tuition assistance.

Summary

The success of the HECC Continuing Education Directors Committee in producing a program like EDUCATION FOR YOUR FUTURE can be duplicated elsewhere--by an established educational association or consortium or by an informal group of colleges and universities. The following conditions created an optimum environment for successful collaboration.

Shared Goals

Every group needs an initial period of time in which members get to know one another and during which a natural group process evolves. Because this committee had worked together for several years, initial start-up was not a problem. Committee members were able to identify problems common to each of their institutions and to work together in developing mutually-beneficial solutions, in this case, the EDUCATION FOR YOUR FUTURE program.

Enlightened Presidential Leadership

The presidents of the HECC member institutions also comprise its Board of Trustees. Although some presidents had initial misgivings about a program which would promote other institutions, these chief administrators were able to see that promoting the concept of higher education in central Ohio would ultimately strengthen each institution. Their faith in their Continuing Education Directors to create a program which would result in matriculating students was not misplaced.

Willingness to Compromise

There were several stages in the design and implementation of this program that produced disagreement: the decision to present a slide/sound, rather than a videotape, program; assignment of corporate contacts to schedule presentations; and final agreement on the length and content of the slide/sound program. Each of these points could have become the final one in the project, but the HECC Continuing Education Directors were willing to abandon personal perspectives for the majority viewpoint.

Outside Support

A collaborative program of this type is extremely attractive to funding agencies. If the Columbus Foundation would not have supported this request, the Higher Education Council of Columbus had several other options, including support from the business community, whose employees would benefit from this type of presentation; from the Ohio Board of Regents, which endorses collaborative efforts in higher education; and from other local and national funding sources, both public and private. The original plan to fund the project by using in-kind contributions from the HECC member institutions could have doomed the project at the production phase.

The Facilitator/Convener Role

The HECC staff scheduled meetings of the Continuing Education Directors to maximize participation--*i.e.*, checked each member's calendar before assigning a date and time to the meeting. The HECC Executive Director took minutes at each meeting, which included a list of follow-up activities to be completed before the next meeting. These minutes and an agenda for the next meeting were mailed by the HECC office to committee members. These "group maintenance functions" were critical to the committee's forward movement. While these tasks need not be performed by paid staff, they must be carried out on a consistent basis by someone in the group.

HECC Continuing Education Directors Committee: 1984-85

The people responsible for the design and presentation of EDUCATION FOR YOUR FUTURE are listed below. Several are now with other institutions or have different titles within their own institutions. Their 1984-85 positions were:

Daina McGary, Director
University Without Walls
(now Adult Degree Program)
Capital University

Michael Young
Director of Continuing Education
The Columbus College of Art and Design

Dale Tippette, Dean
Business and Industry Services Division
Columbus Technical Institute
(now Columbus State Community College)

Gary Farmer
Academic Dean
DeVry Institute of Technology

Peg Thoms, Director
Continuing and Management Education
Franklin University

Cindy Wentz
Director of Continuing Education
Ohio Dominican College

Gay Hadley
Associate Director, Dept. of Credit Prog.
Office of Continuing Education
The Ohio State University

Greg Longacre
Director of Continuing Education
Otterbein College

INTERDISCIPLINARY + INTERINSTITUTIONAL = SUCCESS

Robert L.Denney and Patrick L. Reilly

The Setting

East Carolina University (ECU) is one of the sixteen members of the University of North Carolina and is the major state institution in the eastern part of the state. The University started as a normal school and has evolved into a comprehensive university granting doctoral degrees through its School of Medicine. When the Marine Corps established its two largest East Coast installations in Eastern North Carolina, both were placed in the service area of East Carolina University. Beginning in 1948, just seven years after MCAS Cherry Point was established, the University was offering extension courses at the local high school. A similar practice took place in the Jacksonville, NC area adjacent to MCB, Camp Lejeune.

Over the years the practice of offering classes in these two areas evolved into formal centers of operation for the Division of Continuing Education. In the early 1960's centers were formally established at the two bases. These centers offered lower-division courses with resident credit and a third year of work as extension meaning a person could finish a degree with only one year of residency on campus required. In 1974 both centers were approved as sites for complete baccalaureate and masters degree programs. The period from 1974 through 1979 was characterized by high enrollments, strong community support and easy success. There were large numbers of people wanting to go to school and the problems faced included scheduling enough classes, recruiting instructors and just keeping up with the volume of work generated. The social science degrees offered were popular and attracted people who were seriously interested in completing a degree. It was relatively easy to establish and maintain a rotation of courses because the students were both available and motivated. Without serious effort a cohort of students would form and serve as a nucleus around which classes would materialize. This cohort would proceed through the degree requirements in systematic fashion and although individuals came and went, there was enough consistency and redundancy to allow people to complete a degree in a reasonable manner. Lower-division enrollments were very substantial and easily provided the financial support needed to offer upper-division courses with enrollments that did not cover all expenses.

By 1980, the masses of students were no longer present and

Robert L. Denney, Assistant Professor, Division of Continuing Education, East Carolina University, Greenville, NC
Patrick L. Reilly, Assistant Professor, College of Technical Careers, Southern Illinois University, Havelock, NC

By 1980, the masses of students were no longer present and the formation of cohorts to proceed through degree tracks were much more difficult to form. Competition for students became common. The 1970's had been times of expansion for the ECU military education program and when the population of potential students began to dwindle, the first response was to increase advertising, expand recruiting efforts and compete with the other schools operating in the same setting. Such efforts were largely unsuccessful and when the legislature granted resident tuition rates to all active-duty military personnel and their dependents in 1984, competition for students became almost impossible.

Like ECU, Southern Illinois University's (SIU) College of Technical Careers operates upon the Cherry Point Marine Corps Air Station. The CTC offers baccalaureate degrees in Aviation and Electronics Management at Cherry Point and Health Care Mangement at MCB, Camp Lejueune. These two locations are part of a nationwide military program effort involving over fifty military installations. Only sixteen upper-division courses are directly delivered by SIU/CTC (see Fig. 1) on alternating weekends. Twelve of the courses each require three alternating weekend meeting times with the remaining four courses using an independent study format. The degree program's structure permits the student to immediately begin studies of upper-division work prior to, or concurrent with required elective and general education courses. Those courses must be completed at institutions offering lower-division studies and then transferred to the College of Technical Careers. The complete structure of the degree programs is shown in Figure 2. Elective credit is usually met with ACE-guide recommended credit for military training. For example, a student completing the USMC electronic calibration school will receive over 30 semester hours of credit. Figure 2 also displays the five general education distributions required by SIU. Selected results of the College's annual student profile survey are shown in Figure 3.

The early success of SIU/CTC's programs parallels that of East Carolina University's. Students were eager to enroll in a program that had limited residency requirements and condensed meeting times. Students could complete SIU/CTC major coursework in sixteen months and could actually finish all requirements for the degree at the same time by attending ECU concurrently. Having a local institution available to complete general education requirements was a strong recruiting tool for SIU/CTC. Growth in the programs was steady, as shown in Figure 4, but began to level and eventually decrease by late 1986. The decline can be attributed primarily to the decline in an available student pool among the military and recent tuition assistance ceilings imposed by the USMC.

Cooperation not Competition

East Carolina University was not funded for the military centers. This meant the centers had to be self-supporting. The military centers could not compete with the local community colleges, which are state funded ($5.25/qhr vs. $50/sh), for lower-division students and could not compete with other schools operating on the bases offering profesional degrees that were more attractive than the social science degrees offered by ECU. It came to the point that "if you can't beat 'em, join 'em."

To capitalize on the community college situation, ECU brought in a B.S. in Industrial Technology (Professional) that has a Community College/Technical Institute transfer option. This option maximizes the transferability of the technical courses from the associate degree program. This degree provides another component to what is available from East Carolina University in the Havelock/Cherry Point area and adds another element to the center's enrollment base.

To capitalize on the SIU program it was recognized that their students represented a potential supplement to the ECU student body. ECU therefore set about trying to actively support the SIU program and enticing their students to compete their general education requirements at East Carolina University. ECU also chose to support the SIU request to establish a second degree program at the same time ECU was establishing the Industrial Technology degree program. It was felt that the limited competition between the INDT degree and the SIU degree programs would be more than offset by increased enrollment in lower-division, general education courses.

The first element needed to make this plan work was a positive attitude at the local level. Once the situation was seen as an opportunity rather than a problem, new possibilities began to appear. The beginning point was informal discussions between the ECU and SIU local representatives. These discussions centered around the schedule of classes being offered, when a class would be needed, how many students were interested in a particular course, etc. These talks lead to more formal communications on the transferability of courses, revision of degree requirements, etc. The discussions then turned to topics such as current and projected enrollment trends and specific needs at a given time. When a group of SIU students needing a specific course appeared, the ECU schedule was expanded to include that course at a time and place where it was available to them.

As stated earlier, SIU/CTC students are required to complete general education requirements according to area and hour distributions in five areas. A sample advisement sheet is displayed in Figure 5. Students use the generalized titles shown on the sheet as a guide to selecting courses at local institutions. To prevent registration for courses that will not meet SIU transfer requirements, special General Education Substitution Lists are prepared on institutions having large SIU visiting student populations nationwide (see Fig. 6). These lists are used by SIU advisors to direct the student's lower-division studies. Although intended as an internal advisement tool, the substitution list has been shared with East Carolina University staff at Cherry Point to facilitate the course scheduling process.

If ECU schedules a class not listed on the Substitution List, representatives from ECU and SIU meet to discuss the course description, credit hours, academic area, etc. to determine if a possible addition can be made to the List. The course syllabus is evaluated by the SIU General Education Committee and determinations made rapidly by special request of the local SIU representative.

As the interaction between the two schools developed, another opportunity for cooperation appeared. The supplier of textbooks for SIU announced termination of their working relationship unexpectedly and SIU needed a new source for textbooks. As the matter was discussed a suggestion was made that ECU might consider handling the SIU account. The ECU Student Store had an established system for ordering, delivering and selling textbooks at off-campus centers. Once the matter was analyzed as an opportunity to increase the volume of business in the area and reduce the expense of the business that was already being done, it quickly became obvious that handling the SIU textbook business would involve only minor extensions of existing policies and practices and could be easily accomodated.

There are some problems or potential problems requiring attention. The compatibility of ECU courses with SIU courses is the first issue that had to be addressed. An example is that most ECU fine arts courses carry 2 semester hours of credit while SIU requirements specify 3 semester hours credit for most general education requirements. Similarly, what may be a humanity at ECU may not be accepted as a humanity at SIU. While there is no possibility of resolving these differences at the military center level, it is possible to prevent these issues from being problems for students. Good formal communication with the students involved keeps them informed and prevents unexpected surprises during a degree progress review.

Another potential problem is the inconvenience associated with keeping records on visiting students. This really is more a matter of adjustment than anything else because the actual record keeping is no more complex than for a degree-seeking student; it is just different. Each ECU-visiting student must have written approval from the degree-granting institution for each course taken at another school. Each school must keep records to document the student's progress. Also, appropriate documentation must accompany all certifications to the Veterans Administration for educational benefits.

It is also possible that a student who has been enrolled as a visiting student will seek admission as a degree-seeking student. The potential problem is that this student may not meet ECU admission requirements, regardless of how well he/she has performed as a visiting student. Local procedures had to be developed for admissions appeals as well as for appeals for allowing credit taken as a visiting student to be applied toward a degree.

Benefits

East Carolina University benefits from cooperating with SIU by increasing the enrollment in its program at Cherry Point. Recently, SIU students have comprised from 6% to 13% of the overall enrollment in ECU classes at Cherry Point. More significantly, some classes have as high as 30% of the enrollment from SIU visiting students. What this means is that particular courses can be offered more often and with a higher average enrollment per class. ECU benefits by improved financial returns on selected courses and ECU students benefit by having a better selection of courses, particularly in the sciences, humanities and fine arts. The Student Store benefits by an increased volume of sales to offset relatively fixed operating expenses.

The local availability of general education courses by a dependable source cannot be overemphasized as a factor of the success of SIU programs at military installations. Students must be able to foresee a degree completion within a reasonable amount of time. It is also difficult to recruit a student who cannot perceive a clear path towards a degree. At Cherry Point, students are advised that ECU (1) operates on a semester hour schedule as does SIU, (2) meets the SIU requirement that 60 semester hours be completed at a four-year institution, 48 of which are delivered by SIU/CTC, (3) schedules a majority of required General Education courses, (4) supplies the textbooks for all SIU/CTC courses, (5) has a flexible visiting student policy, and (6) cooperates closely with Southern Illinois University to deliver transferable courses. Many times these points have been the crucial factors used by a prospective student when deciding to apply for admission to the SIU/CTC programs. As the SIU student population increases so do the course offerings and enrollments at ECU. As course offerings become more readily available through increased demand, more students enroll in SIU/CTC programs. Thus, the spirit of cooperation between the two universities fosters what can be termed a "circular recruitment" process. Ultimately, such a process benefits the institutions involved, but more importantly, the student becomes the vital benefactor of the cooperative efforts. The payoff to the military, society, and the student is immeasurable.

Summary

The interaction between ECU and SIU is an example of how institutions can mutually gain by engaging in cooperative efforts. By putting aside the tendency to compete and looking for ways to work together, limitations can be minimized and advantages can be maximized. To make such an effort successful we have found these principles to be vital:

(1) Approach the situation with a positive attitude. Instead of viewing the situation from a conflict perspective, look for the opportunities to cooperate and promote advantages for both parties.

(2) Formal communications are essential to insure that everyone knows not only what is agreed upon, but also the limits of the agreement. Knowing what has not been approved is just as important as knowing what has been approved.

(3) Informal communication is the oil that keeps the machinery working without friction and/or breakdowns. Sharing information about current enrollment, projected enrollment trends, student needs, course schedules, availability of particular courses, etc., is what allows adaptation to the needs of the students involved.

(4) Recognize that not all disagreements can be resolved, but don't let that subvert the working relationship.

(5) Accept that third-party influences may interfere with or even negate the best of plans. But, again, don't let such impediments destroy the working relationship.

(6) Constant adaptation is an ongoing element of the relationship. Degree requirements change, course descriptions are modified, availability of instructors varies and still ways are found of resolving matters to the end of meeting student needs.

The success of the East Carolina University and Southern Illinois University programs was not achieved by merely adopting the six principles outlined above. Underlying each of the principles is a strong spirit of commitment to a non-traditional student population. This commitment is the hidden variable of the equation that appears on the title page and ultimately determines the degree of the success described by the equation.

Program of Study

The Bachelor of Science degree in aviation management, has a minimum graduation requirement of 120 semester hours, distributed as follows:

Experience/Electives	27
General Education, including science, social science, humanities, communications, and health and physical education	45
Aviation Management curriculum	48
Airport Planning	3
Aviation Industry Regulations	3
Airport Management	3
Airline Management	3
Legal Aspects of Aviation	3
General Aviation Operations	3
Aviation Maintenance Management	3
Fiscal Aspects of Aviation Management	3
Labor/Management Problems	3
Work Center Management	3
Applications of Technical Information	3
Professional Development	3
Internship/Independent Study/Special Topics in Technical Management	12
(A total of 12 hours Occupational Internship, Technical Career Subjects, and/or Special Topics in Technical Management)	
Total semester hours	*120*

Program of Study

The Bachelor of Science degree in technical careers, with a major in electronics management, has a minimum graduation requirement of 120 semester hours, distributed as follows:

Experience/Electives	27
General Education, including science, social science, humanities, communications, and health and physical education	45
Electronics Management curriculum	48
Applications of Solid State Devices	3
Digital Circuit Applications	3
Microcomputer Applications	3
Microcomputer Applications Laboratory	3
Optical Electronics	3
Applications of Technical Information	3
Industrial Safety	3
Professional Development	3
Systems Design and Development	3
Legal Aspects of Technical Management	3
Work Center Management	3
Labor/Management Problems	3
Fiscal Aspects of Technical Management	3
Internship/Independent Study/Special Topics in Technical Management	9
(A total of 9 hours Occupational Internship, Technical Career Subjects, and/or Special Topics in Technical Management)	
Total semester hours	*120*

Fig. 1 SIU/CTC Major Coursework

Fig. 2

College of Technical Careers Off-Campus Program Structure

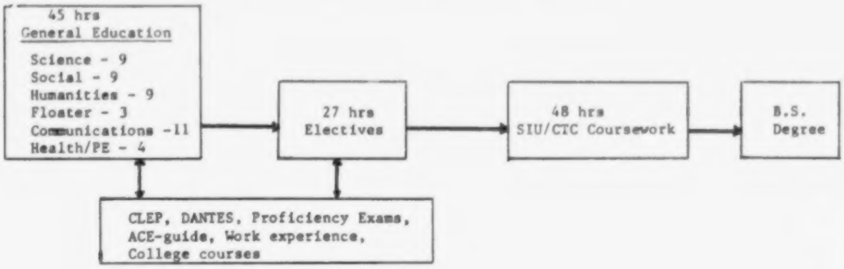


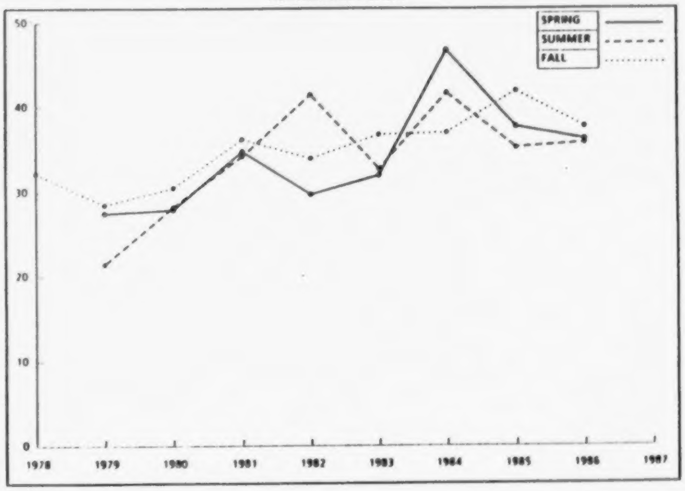
Fig. 3

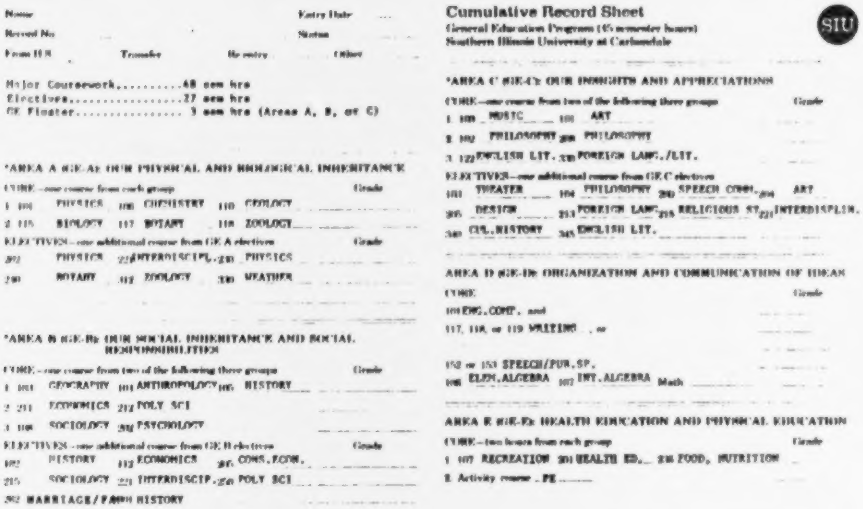
College of Technical Careers Student Profiles - 1988

50%	Ages 25 - 33
22%	Over age 33
18%	Female
27%	Minorities
21%	VA - benefits
20%	Self-paying
66%	Over 30 hrs credit at admission
15%	Over 30 hrs credit from ACE, CLEP, etc.
70%	Over 3 yrs work experience
43%	Over 7 yrs military service
24%	USMC
21%	AF
47%	Navy
8%	Army

Fig. 4

CHERRY POINT
AVIATION MANAGEMENT





Name Entry Date
Record No. Status
From H.S. Transfer Re-entry Other

Major Coursework..........48 sem hrs
Electives.................27 sem hrs
GE Floater................ 3 sem hrs (Areas A, B, or C)

*AREA A (GE-A): OUR PHYSICAL AND BIOLOGICAL INHERITANCE
CORE—one course from each group Grade
1 101 PHYSICS 106 CHEMISTRY 110 GEOLOGY
2 115 BIOLOGY 117 BOTANY 118 ZOOLOGY
ELECTIVES—one additional course from GE A electives Grade
202 PHYSICS 221 INTERDISCIPL. 230 PHYSICS
240 BOTANY 312 ZOOLOGY 330 WEATHER

*AREA B (GE-B): OUR SOCIAL INHERITANCE AND SOCIAL RESPONSIBILITIES
CORE—one course from two of the following three groups Grade
1 103 GEOGRAPHY 104 ANTHROPOLOGY 105 HISTORY
2 211 ECONOMICS 212 POLY SCI
3 108 SOCIOLOGY 202 PSYCHOLOGY
ELECTIVES—one additional course from GE B electives Grade
102 HISTORY 112 ECONOMICS 205 CONS. ECON.
215 SOCIOLOGY 221 INTERDISCIP. 250 POLY SCI
262 MARRIAGE/FAMILY HISTORY

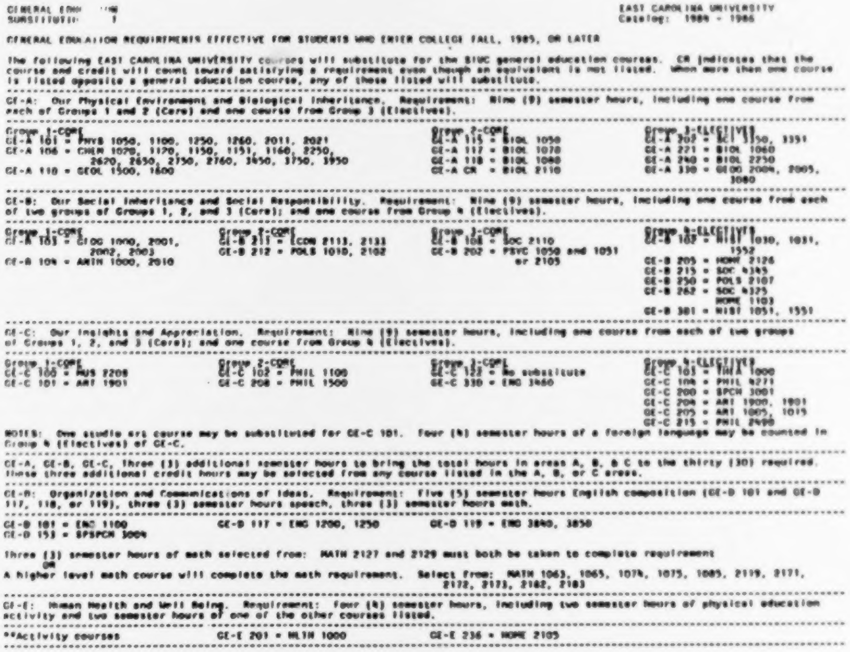
Cumulative Record Sheet
General Education Program (45 semester hours)
Southern Illinois University at Carbondale

*AREA C (GE-C): OUR INSIGHTS AND APPRECIATIONS
CORE—one course from two of the following three groups Grade
1 100 MUSIC 101 ART
2 102 PHILOSOPHY 208 PHILOSOPHY
3 122 ENGLISH LIT. 330 FOREIGN LANG./LIT.
ELECTIVES—one additional course from GE C electives
103 THEATER 104 PHILOSOPHY 200 SPEECH COMM. 204 ART
205 DESIGN 213 FOREIGN LANG. 215 RELIGIOUS ST. 221 INTERDISPLIN.
340 CUL. HISTORY 345 ENGLISH LIT.

AREA D (GE-D): ORGANIZATION AND COMMUNICATION OF IDEAS
CORE Grade
101 ENG. COMP. and
117, 118, or 119 WRITING , or
152 or 153 SPEECH/PUB. SP.
106 ELEM. ALGEBRA 107 INT. ALGEBRA Math

AREA E (GE-E): HEALTH EDUCATION AND PHYSICAL EDUCATION
CORE—two hours from each group Grade
1 107 RECREATION 201 HEALTH ED. 236 FOOD, NUTRITION
2 Activity course PE

Fig. 5 SIU/CTC Student General Education Requirements



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GENERAL EDUCATION                                                              EAST CAROLINA UNIVERSITY
SUBSTITUTION   1                                                               Catalog:  1984 - 1986

GENERAL EDUCATION REQUIREMENTS EFFECTIVE FOR STUDENTS WHO ENTER COLLEGE FALL, 1985, OR LATER

The following EAST CAROLINA UNIVERSITY courses will substitute for the SIUC general education courses.  CR indicates that the
course and credit will count toward satisfying a requirement even though an equivalent is not listed.  When more than one course
is listed opposite a general education course, any of those listed will substitute.
------------------------------------------------------------------------------------------------------------------------------
GE-A:  Our Physical Environment and Biological Inheritance.  Requirement:  Nine (9) semester hours, including one course from
each of Groups 1 and 2 (Core) and one course from Group 3 (Electives).
------------------------------------------------------------------------------------------------------------------------------
Group 1-CORE                                                  Group 2-CORE                  Group 3-ELECTIVES
GE-A 101 = PHYS 1050, 1100, 1250, 1260, 2011, 2021            GE-A 115 = BIOL 1050          GE-A 202 = SCI 3350, 3351
GE-A 106 = CHEM 1070, 1170, 1150, 1151, 1160, 2250,           GE-A 117 = BIOL 1070          GE-A 221 = BIOL 1060
            2670, 2650, 2750, 2760, 3450, 3750, 3950          GE-A 118 = BIOL 1080          GE-A 240 = BIOL 2250
GE-A 110 = GEOL 1500, 1600                                    GE-A CR  = BIOL 2110          GE-A 330 = GEOG 2004, 2005,
                                                                                                        3080
------------------------------------------------------------------------------------------------------------------------------
GE-B:  Our Social Inheritance and Social Responsibility.  Requirement:  Nine (9) semester hours, including one course from each
of two groups of Groups 1, 2, and 3 (Core); and one course from Group 4 (Electives).
------------------------------------------------------------------------------------------------------------------------------
Group 1-CORE                  Group 2-CORE                  Group 3-CORE                  Group 4-ELECTIVES
GE-B 103 = GEOG 1000, 2001,   GE-B 211 = ECON 2113, 2133    GE-B 108 = SOC 2110           GE-B 102 = HIST 1030, 1031,
           2002, 2003         GE-B 212 = POLS 1010, 2102    GE-B 202 = PSYC 1050 and 1051            1552
GE-B 104 = ANTH 1000, 2010                                             or 2105            GE-B 205 = HOME 2126
                                                                                          GE-B 215 = SOC 4345
                                                                                          GE-B 250 = POLS 2107
                                                                                          GE-B 262 = SOC 4325
                                                                                                     HOME 1103
                                                                                          GE-B 301 = HIST 1051, 1551
------------------------------------------------------------------------------------------------------------------------------
GE-C:  Our Insights and Appreciation.  Requirement:  Nine (9) semester hours, including one course from each of two groups
of Groups 1, 2, and 3 (Core); and one course from Group 4 (Electives).
------------------------------------------------------------------------------------------------------------------------------
Group 1-CORE                  Group 2-CORE                  Group 3-CORE                  Group 4-ELECTIVES
GE-C 100 = MUS 2208           GE-C 102 = PHIL 1100          GE-C 122 = No substitute      GE-C 103 = THEA 1000
GE-C 101 = ART 1901           GE-C 208 = PHIL 1500          GE-C 330 = ENG 3460           GE-C 104 = PHIL 4271
                                                                                          GE-C 200 = SPCH 3001
                                                                                          GE-C 204 = ART 1900, 1901
                                                                                          GE-C 205 = ART 1005, 1015
                                                                                          GE-C 215 = PHIL 2490
NOTES:  One studio art course may be substituted for GE-C 101.  Four (4) semester hours of a foreign language may be counted in
Group 4 (Electives) of GE-C.
------------------------------------------------------------------------------------------------------------------------------
GE-A, GE-B, GE-C, Three (3) additional semester hours to bring the total hours in areas A, B, & C to the thirty (30) required.
These three additional credit hours may be selected from any course listed in the A, B, or C areas.
------------------------------------------------------------------------------------------------------------------------------
GE-D:  Organization and Communications of Ideas.  Requirement:  Five (5) semester hours English composition (GE-D 101 and GE-D
117, 118, or 119), three (3) semester hours speech, three (3) semester hours math.
------------------------------------------------------------------------------------------------------------------------------
GE-D 101 = ENG 1100           GE-D 117 = ENG 1200, 1250     GE-D 119 = ENG 3840, 3850
GE-D 153 = SPSPCH 3004

Three (3) semester hours of math selected from:  MATH 2127 and 2129 must both be taken to complete requirement
    OR
A higher level math course will complete the math requirement.  Select from:  MATH 1063, 1065, 1074, 1075, 1085, 2119, 2171,
                                                                                2172, 2173, 2182, 2183
------------------------------------------------------------------------------------------------------------------------------
GE-E:  Human Health and Well Being.  Requirement:  Four (4) semester hours, including two semester hours of physical education
activity and two semester hours of one of the other courses listed.
------------------------------------------------------------------------------------------------------------------------------
**Activity courses            GE-E 201 = HLTH 1000          GE-E 236 = HOME 2105
------------------------------------------------------------------------------------------------------------------------------
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Fig. 6 SIU/CTC Substitution List: ECU

PARTNERSHIPS FOR ARTICULATION
-SUCCESSFUL MODELS OF COOPERATION BETWEEN TWO-YEAR COLLEGES AND A UNIVERSITY-

by Kay Hill

Introduction: Opportunities and Barriers

Diversity of educational opportunities, mobility of college students, and changing needs and goals of graduates have all contributed to increased opportunities for transfer from one college to another. The opportunity for transfer is extensive in most states and regions. In North Carolina, where institutional diversity is pronounced, there are 58 public community/technical colleges and institutes, 16 public senior institutions, 8 private junior colleges, and some 40-50 post-secondary institutions of religion, business, trade, and real estate. And students are mobile. The number of transfer students from North Carolina community/technical colleges increased 125% in a ten-year period; an average of 900 students transferred from public senior institutions to public junior institutions each of those years. Changing job requirements, career changes, and new educational objectives bring many students back to college (often as transfer students) after an hiatus of several years.

While this diversity, mobility, and change mean greater opportunity for transfer, there are accompanying problems. Transfer students often encounter barriers which cause them to lose credits, time, and incentive. Increasing opportunities for transfer means easing the barriers to access and meeting the needs of transfer students through equitable policies and procedures.

The needs of transfer students, particularly transfer students with associate degrees, can often best be met through cooperative efforts of two-year colleges and the university. Barriers to transfer are sometimes artificial barriers that can be eased or eliminated through mutual respect and equal partnerships.

Kay Hill, Project Director and Coordinator for Transfer Programs
Continuing Education and Summer School
Western Carolina University
Cullowhee, North Carolina 28723

Three successful models or projects which have been jointly developed by Western Carolina University and public community/technical colleges to improve articulation are the subjects of this paper. The first is the cooperative transfer agreement, the second is the Community Oriented Regional Education (CORE) program, and the third is the Vocational/Technical Instructor Project. These projects have provided increased transfer opportunities, facilitated the transfer process, and strengthened junior-senior college relationships.

Cooperative Transfer Agreements

Policies and procedures for developing cooperative transfer agreements were instituted at Western Carolina University in 1976 to more equitably meet the needs of the increasing number of students transferring to bachelor's degree programs from Associate in Applied Science degree programs. The increase in transfer students with AAS degrees followed the establishment of the NC Department of Community Colleges in 1963. Today, there are 58 colleges in the community college system. Some offer traditional college transfer programs and award Associate in Arts and Associate in Science degrees. All offer technical-level (Associate in Applied Science degree) and vocational-level (diploma and certificate) programs.

Prior to 1970, little or no effort was made by North Carolina colleges and universities to consider the transfer of technical-level credits. As the strength of the technical programs and the number of potential transfer students increased, some technical credits were considered and approved for transfer. From this cautious beginning, came the development of policies and procedures for cooperative agreements.

A cooperative transfer agreement is a program-to-program agreement by which a specified associate degree program at the two-year institution is incorporated into a specified bachelor's degree program at WCU. Cooperative agreements, because they take into account the total degree programs and not simply individual courses, allow for greater flexibility and reasonableness in transfer. The agreements are contracts which "spell out" the transferability of credits and the remaining degree requirements.

Cooperative agreements articulate the transfer from "regular" associate degree programs to "regular" bachelor's degree programs; no "special" programs have been developed to accommodate the transfer agreement.

An agreement is developed by faculty of the cooperating institutions following identification of programs with potential for an agreement and determination of interest in and feasibility of an agreement. The program developers develop a working relationship, exchange information on programs, courses, and facilities, and visit each others campuses. Through this process is developed not only a mutual articulation agreement, but a greater appreciation and understanding of each school's aims and objectives.

The general education component of the agreement is developed in cooperation with the Coordinator for Transfer Programs at WCU. Because the applicability of courses to general education requirements is subject to approval of appropriate WCU department heads, the Coordinator works to facilitate this review and approval process. The faculty program developers work together to determine which major and elective requirements may be met by transfer and which courses need to be completed at WCU. When the program developers have completed a draft contract, it is submitted to their respective department heads and deans for review. The Coordinator for Transfer Programs checks the draft with the Office of Academic Affairs for consistency with WCU academic regulations and policies. If necessary, the Coordinator for Transfer Programs and the WCU program developer will negotiate on differences or exceptions made by the cooperating institution. After negotiations are completed, the revised agreement is submitted for final review by officials at both institutions. Upon receipt of the approved copy of the agreement from the cooperating institution, a joint announcement of the agreement may be made by the Vice-Chancellor for Academic Affairs and his/her counterpart at the two-year college. The Coordinator for Transfer Programs maintains the agreements and provides for necessary, periodic internal and external reviews.

In cooperation with other colleges and institutes, Western has developed more than 90 program-to-program agreements with more than 20 schools. Agreements leading to a wide array of bachelor's degrees have been approved, including nursing, industrial technology, manufacturing engineering technology, child development and family relations, criminal justice, health services management and supervision, parks and recreation management, natural resource management, medical technology, environmental health, business administration, radio and television, art, and medical record administration.

Community Oriented Regional Education Program

The success of efforts to improve articulation between WCU and technical and community colleges through cooperative transfer agreements led to the development of the Community Oriented Regional Education (CORE) model and program at Western. A cooperative project with area two-year colleges, Western's CORE program is specially designed to meet the needs of graduates of two-year institutions who wish to obtain baccalaureate degrees in career-related disciplines. It is specifically aimed at adults who find it very difficult or impossible to leave their home communities.

By working together with clusters of technical/community colleges, a unique degree program whereby general education and major field courses can be delivered at a reasonable cost in the candidates' communities was developed. To deliver this program required redesigning the general education offerings of the University to create an equivalent group of new upper division courses which could be delivered by regular faculty at a location and on a schedule to meet the needs of the off-campus two-year graduates.

The program is extremely cost effective in terms of its use of existing university and local library and facility resources. No special state or national funding was used either to develop the model or operate the program--all costs were contained within the university's normal resource base or from fees paid by candidates.

Carrying upper division courses to the community offers some benefits for WCU as well as for the students and communities served. For example, it constitutes a new source of students. Although the off-campus students are not counted for funding purposes, the program is self-supporting. Some of the students, as we anticipated, transfer to campus to speed up their progress; some of the graduates enter our master's degree programs. Relationships with community/technical institutes have been strengthened and the community and regional service is valued by the community.

The initial hurdle to be overcome in developing the program was to determine the curriculum the students would follow. Technical college graduates have already taken a considerable amount of work that appears comparable to upper division courses at the University, yet they have taken very few of the traditional university freshman-sophomore level courses. Hours of work were spent developing a curriculum that would resolve the problems inherent in "meshing" the associate and bachelor degree programs and insure a quality upper division program.

The CORE model for a baccalaureate program for graduates of community colleges/technical institutes was approved by Western Carolina University in 1977. Eligibility requirements include (1) completion of a two-year degree (AAS, AA, or AS) in a program accepted by WCU for inclusion in the program, (2) completion of at least 29 quarter hours (19 semester hours) of courses considered to be in the area of general education by WCU, (3) completion of specific courses or numbers of credit hours in the area of the intended major as specified for the program. Deficiencies in general education or major courses may be made up after entrance into the program, or, in the case of necessary pre-requisites, prior to registering for courses requiring the relevant preparation.

The program of courses to be taken at WCU is a minimum of 64 semester hours. This includes a prescribed program in general education at the upper division level. The general education package is designed to provide exposure to all major objectives of WCU's general education program.

The general education package consists largely of inter-disciplinary courses which are team taught. Four of the courses were developed and are delivered by a team of faculty representing disciplines in history, English, music, art, and foreign language. The courses were originally developed as a part of a grant from the National Endowment for the Humanities.

The WCU program also requires a minimum of 30 semester hours in the major or professional area as prescribed for the specified program. For purposes of the program, WCU automatically accepts 96 quarter hours or 64 semester hours from the two-year degree program as credit toward the baccalaureate degree.

Specific majors and their pre-requisite AAS program(s) must pass through the normal approval channels at Western Carolina University. Majors or programs requiring more than a total of 64 hours at WCU must make it clear to prospective students that degree completion will require more than 128 hours.

The CORE model has been used to develop and deliver programs leading to the Bachelor of Science in Business Administration with a major in General Management, the Bachelor of Science in Industrial Technology and Manufacturing Engineering Technology, and the Bachelor of Science in Nursing to associate degree graduates in business, engineering technologies, and nursing.

The programs were designed in cooperation with community/technical colleges to help assure that students could adjust easily to the 4-year college courses. Planning stages included an extensive examination of curricula at both the two and four year levels to make sure that students would be prepared for the transfer and their needs would be met by the CORE program. Cooperation for the CORE program grew out of a history of negotiated agreements between WCU and community colleges in North Carolina.

Although the CORE model operates specifically for graduates of two-year institutions, it has had an impact on the University campus. The selection of general education courses to be offered at the CORE site required a reexamination of what is basic to the liberal arts component of a baccalaureate level education. That reexamination played a significant role as the University reconsidered and revised its general education program. It has been a stimulus for rethinking the meaning of general education and the nature of a major.

Vocational/Technical Instructor Project

The Vocational/Technical Instructor Project is another example of a successful partnership between two-year colleges and a university. This project, funded by the North Carolina Department of Community Colleges and administered by Western Carolina University, assists North Carolina community and technical college instructors to earn a bachelor's degree. The purpose of the project is to improve the delivery of instruction by vocational/technical teachers in the public two-year colleges. The program builds on the present skills and technical competencies of the faculty, augmenting their preparation in the humanities and sciences, while improving their knowledge of human learning problems. Degree courses are offered by WCU on the community college campuses and on our Cullowhee campus in classes arranged to fit the schedules of these full-time community college employees. The project provides stipends for tuition, fees, and books for courses taken for the bachelor's degree by qualified instructors.

Because of the rapid growth and development of technical institutes and community colleges in North Carolina and the need to find vocational/technical instructors experienced in a trade, many instructors who do not have baccalaureate degrees have been employed in voc/tech programs. As a result, these teachers often lack any post-secondary education in liberal arts or educational methods which would help them to use different approaches in facilitating the teaching/learning process.

Since it did not appear that traditional majors would benefit all voc/tech instructors, one of the initial steps in implementing the project was to plan and develop a specially designed baccalaureate degree program. Already in place at WCU was a B. S. in Special Studies which allows for a concentration in interdisciplinary areas.

The B. S. in Special Studies with a concentration in Occupational Education was developed to serve the educational needs of faculty teaching trade and industrial areas. The 128 semester-hour program includes components in general education, professional and educational training, a technical competency, and electives.

Courses to meet the general education and elective requirements of the degree program are typically available to project participants at the local community or technical college. The technical competency requirement is often met by a combination of transfer credit, WCU credit, and experiential learning credit. The courses in the professional training component of the degree may be offered by WCU at off-campus sites and/or through on-campus weekend and compressed courses. A minimum of 30 semester hours at the junior-senior level must be earned through enrollment in WCU courses.

To meet the technical competency requirement of the program (34 semester hours), the student must demonstrate competency in at least one instructional area. A maximum of 24 semester hours may be granted for experiential learning and applied to the technical competency requirement.

Experiential learning competency may evolve from several sources: (1) programs of study completed in trade and vocational schools, (2) relevant short course instruction including college seminars, training programs, company seminars, apprenticeship schools, and military service schools, (3) relevant non-teaching work experience, and (4) demonstration of specific competencies by appropriate test scores on exams including the National Occupational Testing Institute exams, state licensing exams, and WCU challenge exams.

While many project participants have enrolled in the BS in Special Studies (Occupational Education) program, all degree and major options offered by WCU are potentially available to voc/tech participants. Among the majors represented by the instructors enrolled through the project are math, business education, computer information systems, office administration, manufacturing engineering technology, nursing, and health services management and supervision.

Approximately eighty instructors from 19 of the 58 community/technical colleges are currently involved in the project. Twenty-eight instructors have received bachelor's degrees from WCU through the project and eleven participants will graduate in May 1988. At least 36 teaching fields have been represented by those enrolled in the program. They range from automotive areas and carpentry to air conditioning and welding, from industrial mechanics and management to sawyer and electronics, from nursing and emergency medical science to dental laboratory technology.

The three projects described here could, in my view, have only been successful through cooperative efforts of the two-year colleges and the university. Many barriers to transfer have been eased or eliminated through mutual planning and delivery of these programs. The projects have increased access for students, helped to facilitate the transfer process, and strengthened junior-senior college relationships.

PROJECT LEARN: A COLLABORATIVE PATHWAY TO A BSN DEGREE

Carrie B. Lenburg

Cross (1981) emphasized several years ago that educators can compete, run parallel programs or become partners in the business of preparing individuals for the work needed for the survival and improvement of society. The nursing profession is moving continuously from a stance of competition and parallelism toward collaboration. Project LEARN is a bold example.

The creators and implementors of the New York Regents External Degree Program, now called Regents College (RC), realized and advocated the benefits of cooperation and collaboration among institutions in the education and service sectors of society from its inception in 1971. The concept of credentialing learning acquired external to the institution awarding the degree is central to Regents College. The notion that learning is unrestricted by time, place and person never has been more important in education, including nursing, than it is now. Nor have flexibility and educational inventiveness been more attractive and feasible. The images and concepts described in Diversity by Design (1974), the final report of the Commission on Non-Traditional Study, finally are being recognized and implemented by many academic institutions. Since then, research and publications on adult learning, competency based education and objective assessment have proliferated and are important references for us in nursing education. Several key sources are listed at the end of this paper (Brookfield, 1986; Knowles, 1985; Long, 1983; and Wlodkowski, 1985).

All of us are aware of the dramatic and substantive changes in educational demographics and economics and the consequences of these changes for nursing and higher education. The tangible realities of these changes, even though forecasted several years ago, provide powerful incentives for faculty and administrators, even in nursing, to readjust opinions and practices held dear in the past; it's a matter of survival.

Our willingness and ability to take thoughtful risks and to create new approaches to existing problems are key factors that will determine the contribution the nursing profession can make in the future health care of society.

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Many experts affirm that nursing may never again have a sufficient number of women or men entering the discipline needed to provide the kind of service traditionally considered essential for the public good. Currently, students, including those interested in nursing, are the shoppers. Recent reports indicate that they are more interested in future financial gain and careers than altruism and that they are looking for programs that suit their current life circumstances. Thus, colleges and nursing programs are beginning to tailor programs to meet students' needs rather than the preferences of faculty and administration. Creative, flexible, and adult oriented options suddenly are becoming more acceptable, and even the norm in some institutions, rather than the deviant case of just one or two years ago. This, therefore, is an exciting and challenging time for those of us aligned with Ferguson's Aquarian Conspiracy (1980) to promote a new paradigm of education. The integration of philosophies and methods of adult education, competency based education and objective assessment is more critical than ever.

An Innovation Called Project LEARN

Project LEARN, which I began to conceptualize in 1982 for RC students and have implemented in many locations throughout the United States implements in a new way the strategies for learning and motivation presented by Wlodkowski (1985). He states that choice, optimum challenge and positive feedback are three essential factors related to motivation. Project LEARN epitomizes these factors and incorporates many fundamental principles of learning advocated by other adult learning experts.

Within this changing context, I want to describe Project LEARN, which incorporates some of the oldest principles of learning with some very new ideas of interinstitutional collaboration. Many of its components evolved from previous collaborative efforts described elsewhere in the literature (Lenburg, 1983, 1984, 1986; and Mitchell, 1987). During several years of responding to the requests of administrators and nurses for assistance, I began to structure a set of principles, objectives and activities into a cohesive generic statement, and decided it had to have a name. The acronym Project LEARN ultimately was chosen because the objectives and activities of collaboration with other institutions revolved around the coordination of LEARNING, EXPERIENCE, ASSESSMENT, RESOURCES and NETWORKING for nurses in a given community who were interested in earning a degree from Regents College. This model developed by RC also may be relevant to other institutions as well.

I will use four examples to illustrate the concept, outline the purposes and objectives of the project and then review a sample of principles I consider especially relevant to adult learning. The CEO of one Project LEARN called it "an irresistible educational alternative." I hope this presentation will help you to understand his and my reasons for enthusiasm.

The four examples present different ways to collaborate with other institutions to provide new pathways to assist nurses to earn degrees. We have many other similar projects at the ADN and BSN levels. Two of the examples are hosted by colleges and two by hospitals. One is focused in a hospital medical center, one serves a large metropolitan area, one recruits from a region of a state, and one is a state-wide effort that also accommodates nurses from adjacent communities of two surrounding states. Both public and private institutions are involved; some are funded internally and some have obtained funds from external sources. All are serving nurses in search of educational mobility and institutions interested in recruitment and retention of qualified and competent nurses.

Two Examples in Hospital Settings

Albany Medical Center (AMC) is an 800 bed regional medical center in upstate New York. In 1987 the hospital board made the important decision to close its century-old diploma school of nursing, and thus publicly acknowledged the institution's determination to employ nurses with academic and professional credentials. This was especially relevant at a time when the shortage of RNs was increasing. Albany has RC, one private college that offers BSN and MSN degrees and three other colleges that offer associate degree nursing programs. It also has other accredited colleges and universities; the medical center has a division of academic health sciences and offers a number of degree programs.

Regents College and AMC have existed within half a mile of each other for 15 years, but had few occasions to work together until 1984 when the director of nurses and I talked about ways we could improve educational opportunities for nurses at the hospital. As part of the protocol for Project LEARN, we created an advisory group of nurse leaders from institutions in the community and met periodically for two years but made slow progress. But in the autumn of 1986 the timing was right for change.

As AMC faced the serious RN shortage, the increasing acuity of patients, decreasing funds, and a major expansion of its physical facilities, its senior administrators also began to realize the benefits of the Regents nursing program and its Project LEARN. After eight months of discussing our mutual concerns and commitments, we implemented a fully funded, contractually arranged Project LEARN. Soon thereafter, AMC and RC employed the on site project director and the RC project associate and appointed its 20 member project advisory board. During the first six months more than 200 nurses at the medical center had attended informational programs and many had participated in group or individual advisement sessions related to earning a BSN degree.

This newest Project LEARN, still less than one year old, already has achieved its initial objectives of assisting nurses to be motivated to earn a BSN degree, to be attracted to and to remain employed by the medical center. The Project is helping nurses, the hospital, the patients in the community, and other institutions that provide educational services to students. Project LEARN is designed to be a "win-win" alternative.

Another hospital-based Project, now three years old, is located at the Cheshire Medical Center in Keene, NH. Its president was convinced that BSN prepared nurses were essential for the quality of care required by patients. After discussing BSN options for three years unsuccessfully with the state university system, located more than 100 miles away, he and others in the community turned to Regents College for assistance. They wanted to collaborate in some form of degree-articulation-at-a-distance arrangement, particularly for nurses at the medical center. They had not yet heard of Project LEARN.

After several months of consultation and discussions in Albany and in Keene to clarify objectives, roles and responsibilities, we signed a contractual agreement to implement a BSN Project to be sponsored by the Cheshire Medical Center. The trustees voted to use endowment funds from the diploma school (closed two years earlier) to support the local on site project director, to cover expenses of convening the project advisory board, provide tuition assistance and the essential consultation and travel expenses for RC nursing staff to establish a statewide option for nurses in this rural region of New England.

Subsequently, the project advisory board was selected with nursing representatives from throughout the region and the project director was employed. I willingly admit the pride and excitement we felt on learning that the person selected for the position, Paula Stratford (now Kierstead), was a graduate of the Regents BSN program. She also had considerable experience in nursing service in the area, was known and respected by many in the nursing community. Her experience of completing RC's program and her enthusiasm for assisting others made her a most appropriate and attractive choice for the position. She has done an outstanding job and has earned the respect of nurses in the area; in 1987 she received the state nurses association Nurse of the Year Award.

The Keene project is accomplishing its objectives of informing nurses of educational options provided by RC and other programs and assisting them to be successful. The staff helps them to prepare to meet the RC nursing requirements, assists them to find and successfully complete the general education requirements and to avoid unnecessary and costly failure. Members of the advisory board from home health care, extended care and other acute care facilities, as well as providers of general and nursing education courses help to identify resources and pave the way for nurses to gain access to them. The project director and the RC project staff help nurses in the region to establish and coordinate self-directed study groups and workshops specifically designed to orient students to the expectations of the demanding performance examinations. The project staff also helps students to find and connect with each another for the emotional and educational support networking that is an important catalyst in the learning-changing-growing-evolving process of professional development. Much of the work between Keene and Albany is done by teleconferences and correspondence; several times a year the RC staff travel to the project site to provide consultation to the project staff and administration, individual field counseling and advisement and orientation study sessions for groups of students preparing to meet particular requirements.

This state-wide interinstitutional collaborative project provides a broad array of services and opportunities for nurses who otherwise would not attempt to earn a degree or would be struggling hard to meet their educational and professional goals. The extent of involvement and cooperation is remarkable. The project staff and advisors (on site and at RC) serve as facilitators and consultants to individuals as well as small groups of students. They promote networking for group support and study, assist them to create an individual study plan for program completion, to build self-confidence and to minimize stress related to distance learning. The project also provides a clearinghouse of information about where students can find college and non-college learning resources in the region. Many nurses and administrators in service settings throughout the region volunteer their time and efforts to help meet the project objectives. The cooperative advisement and support arrangements are especially helpful in assisting students to prepare for the four nursing performance examinations, which require 100% accuracy of the specified critical elements under the one-to-one direct observation of the RC clinical examiners at the Regional Performance Assessment Centers.

Project LEARN in Keene is another example of a win-win situation: scores of nurses in the region have an opportunity to earn a BSN degree while working full time, which otherwise would be impossible. The hospitals and other service providers are able to support dedicated local nurses while retaining them as full time staff; nurses feel their experience, motivation and ability are valued assets, and that they can work at their own pace in meeting requirements and can use conventional college courses or nationally recognized proficiency and performance examinations to document the equivalence of their knowledge and competence. Any and all local resources are acceptable for learning; where indicated, the project staff and advisory board members search out existing opportunities or help to create new learning opportunities. When such learning is not already approved for academic credit students are required to use the standardized cognitive and performance examinations developed and administered by the RC nursing faculty to validate that they have met the level of competence required by the degree. This is creative, responsive, state-wide, collaborative and humane educational innovation.

Two Examples in College Settings

The other two examples are located in college settings and, thus, provide different variations of implementation. The basic objectives are the same, ie, to assist nurses to earn degrees, to prepare for leadership positions in the profession, and to reduce the alarming shortage of qualified nursing personnel in institutions and community settings.

Miami-Dade Community College, nationally known for its participation in community outreach, continuing and adult education, offers an associate degree nursing program with on-campus, off-campus and weekend options. With this commitment to community service, I was not surprised when Jean Starke, nursing chairperson, requested my assistance and collaboration several years ago to establish a project, which would become an early forerunner of Project LEARN. After months of consultation, and considerable opposition from those in the community who did not support the idea, the proposal was funded and a full time project director was employed.

This project provides many of the same services described above, but emphasizes the general education opportunities available at the college applicable to meet some requirements for the degree. The most innovative component of this project, however, was the creation of continuing education courses in nursing specifically designed to meet the needs of RC students. This aspect of the proposal required considerable consultation from the nursing staff of Regents College to assist the project director and nursing faculty to learn the RC requirements and identify those content categories usually most difficult for individual distance learners to learn independently. The masters prepared nursing faculty at the college developed the CEU courses and provided guidance to those who enrolled. (The same CEU courses were used by nurses to meet the state's mandatory requirements for continuing licensure.)

The project staff developed a newsletter to announce courses and important deadline dates for the courses as well as RC examinations (ACT PEP outside the state of New York), to share success stories and help RC students to establish helpful and profession-oriented networks. Hundreds of nurses have been served through this interinstitutional collaborative project. It is another example of a successful win-win endeavour for nurses, the college, employers and the community.

The fourth example is hosted by the C. W. Post Center of Long Island University (LIU). It, too, provides most of the services described above, but it has a different and interesting focus. Long Island has many LPN programs located in the high schools (BOCES) as well in the typical agencies for adults. Many of these LPNs are capable and desirous of continuing in nursing to the BSN level, but they experience the same difficulties as other working adult learners in using ADN programs, if and where they are accessible. LIU, which offers an upper division BSN program for RNs, requested assistance from Regents College to forge the connecting link between capable LPN learners and the BSN program. After much discussion and consultation, LIU obtained external funding to establish a Project LEARN. In this instance the central focus is to assist LPNs to establish study networks, find support and assistance through remedial and regular college courses, and specially designed workshops and continuing education offerings pertinent to the nursing examination. As with other RC projects, the host institution is required to use an advisory committee with representatives from the service sector and other academic institutions in the region and the RC nursing coordinator. This, too, is a successful project.

Purposes and Objectives of Project LEARNs

The coordinator of Regents College Nursing Program consults with authorities in nursing service and education in a given community, at their request, for the purpose of establishing an interinstitutional collaborative learning project to assist nurses to meet the requirements for a RC associate or baccalaureate degree in nursing. The project is designed to provide an alternative, or an educational option where none currently exists; it is not intended to compete with existing comparable educational programs; collaboration is central to its purpose and success. By assisting institutions to expand and coordinate educational and professional opportunities, Regents College extends its capacity to help adult learners achieve their goals and thus to improve the quality of health care services in many communities throughout the nation. Collaboration rather than competition makes it possible.

Basically, the purposes of Project LEARN are:

1. to assist nurses to learn, become more competent, improve professional practice behaviors, accomplish role transition and earn the nursing degree; and,

2. to promote the use of such concepts as diversity of learning through work and self-directed study as well as campus-based courses, competency-based education and practice, continued lifelong learning, and criterion-referenced performance examinations to validate competence.

The RC nursing coordinator and staff provide the initial and ongoing consultation for the project staff and advisory boards for all projects. This provides essential assurance for continuity, quality control and insight from shared experiences to improve these educational alternatives. Specific activities vary with each project as described above, but the basic objectives are:

1. to understand RC and the philosophical, educational, economic, political and psychological components of establishing a local

chapter of Project LEARN;

2. to implement a structure to coordinate and foster the collaborative efforts of representatives from multiple and diverse institutions and agencies interested in promoting educational mobility opportunities for nurses;

3. to promote maximum use of existing funds, resources, personnel and systems that facilitate learning applicable toward degree requirements;

4. to develop additional learning opportunities, resources, and support systems where needed and to seek additional funds as needed to accomplish the objectives; and

5. to promote the implementation, support and quality control of the educational project within the scope of its intended purposes and geographical boundaries.

Some Basic Principles of Learning (and Teaching)

In designing and implementing innovative educational options like the Regents College external degree programs and Project LEARNs, many fundamental but forgotten educational principles need to be resurrected and revised to fit the current realities. I have drawn from the writings of Brookfield, Cross, Knowles, Wlodkowski and many others, and over the years have shaped them into a unique configuration to suit our special needs. Some of the most important ones are summarized below. Think about them within the context of Project LEARN and use them stimulate your own creative ideas.

1. Learners are responsible for their own learning and are accountable for demonstrating competence against the predetermined standard of expectations set by the faculty and the profession.

2. Learners with adequate ability, motivation, support networks, and resources can learn what is required, if and when they know the extent and level of expectations, the description and scope of content to be learned, the definition and standards of competence, and if they have the opportunity to document objectively their achievement.

3. Learning can occur any time and place, at any pace, and by using many combinations of human and material resources. Thus, the competence required can be achieved in environments external to the institution awarding the degree as well as within its structure. Such external learning, when it is documented through academically credible means, is equivalent to comparable learning gained through the conventional campus-bound approaches.

4. Learners who participate in diagnosing their learning needs

and planning ways to meet learning objectives are more apt to take ownership of responsibility for acquiring behaviors expected by the educational institution.

5. Faculty at the degree-awarding institution are responsible for determining content, competence and recommendations for learning and using methods to objectively document achievement.

6. Teachers (faculty) are educational facilitators, consultants and role models for learners. They provide focus, suggestions, a collective wisdom gleaned from their own experiences, guidance for problem solving, and interaction intended to promote positive change. Those who teach may not have the title of faculty, nor must they be employed by academic institutions. They are competent persons willing to share expertise with those who want to learn. Adult learners use many teachers and expert role models to gain degree-related competence and professional behaviors.

7. The competence required for professional nursing practice is neither mysterious nor beyond the ability of persons with average intelligence, motivation and resources. It can be learned using either conventional or nonconventional methods. Creativity and flexibility can be used in either situation and similarly, standards can be upheld or violated in either situation as well. Self-directed learning and the methods of earning a degree discussed in this paper should not be confused with anti-intellectualism, anti-professionalism, or apprenticeship education; they are worlds apart.

8. The knowledge and competence required to practice nursing according to the standards set by the profession and higher education can be identified and objectively assessed and such documentation is evidence of meeting academic requirements.

Summary

The RC external degree nursing programs and Project LEARN are based on these and related principles. They are logical and pragmatic alternatives that have withstood the test of intense scrutiny. They have been criticized and denigrated, but only by those who feel threatened, do not understand or choose to reject their positive usefulness as solutions to the critical problems we all must face together and solve together.

A large percentage of nurses and others who want to enter nursing are seeking opportunities to learn, to become more competent and qualified for advancement in the profession. These adult learners are potential students in bachelors, masters and doctoral programs in nursing, and to a large extent the survival of the profession depends on the response of educators to the current problems with creative solutions. Project LEARN is a creative response with significant potential.

With this in mind, I challenge you with an expression from an unknown sage that has been an internal navigator for my career and is relevant here: "Do not go where the path may lead, go instead where there is no path and leave a trail."

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COLLABORATIVE PROJECTS IN THE HUMANITIES: ADMINISTRATIVE AND FACULTY PERSPECTIVES

Paul F. Reichardt

During the fall and winter of the 1986-87 academic year, I conducted a survey of administrators and faculty at selected four-year colleges and universities concerning collaborative activities among humanities disciplines and the attitudes of both respondent groups toward these activities.

The purpose of this survey was to gather information on the present state of academic collaboration in the humanities at primarily undergraduate institutions, with particular reference to those subjective factors (e.g. attitudes, perceptions, values) which influence the variety, longevity, and quality of collaborative projects. Objective factors influencing collaborative activities (e.g. funding decisions, competition with programs in the sciences or social sciences, curricular structures) were addressed by the survey as well, but the primary purpose of my study was to discover what administrators and faculty at target institutions were thinking about humanities collaboration and how this thinking influenced what these institutions were doing collaboratively.

The survey purposely limited the institutions studied to private liberal arts colleges and public regional colleges and universities engaged primarily in undergraduate education, since it is at this level that collaborative activities traditionally have had their greatest impact on the curricula of American higher education. According to the most recent figures on enrollments in higher education supplied by the Carnegie Foundation, institutions of the type chosen for study by my survey serve almost 32% of the total student population (graduate as well as undergraduate) for all American institutions of higher learning, or a total of some 3,880,000 students. The dynamics of collaboration in the humanities as it relates to a student population of this size offers a significant insight into the role of the humanities in undergraduate education.

Survey forms were distributed to academic administrators (deans or their designates) at one hundred and eighty-five institutions of the variety I have described. These administrators were asked to provide names of faculty who had participated in collaborative activities in the humanities. For purposes of this study, the term "humanities" referred to the fields of art, English, foreign languages, history, music, philosophy,

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religion, and theater. Eighty-seven academic administrators returned completed questionnaires, and a total of one hundred and fifty-seven faculty responded likewise. The total responses from returned questionnaires provided an adequately numerous and diverse pool of data upon which to draw for purposes of the study.

The survey thus consisted of two quesionnaires, one for academic administrators and the other for humanities faculty who were participating or had participated in collaborative projects. The two questionnaires were correlated by means of three common question categories, the first requesting information on the nature and variety of collaborative activities present at institutions surveyed (Section I), the second focusing on the perceived relation of collaborative activities to institutional goals and priorities (Section II), and the third directed at faculty attitudes toward collaborative projects and the relation of these projects to the professional development of participating faculty (Section III). In addition, a few questions on each questionnaire were posed to only one of the survey constituencies in order to focus on issues most pertinent to their separate roles in collabortion.

In the remainder of my presentation, I will describe some of the more interesting results derived from the survey and then discuss the implications of these results for improving our understanding of the dynamics of collaboration and enhancing the quality of collaborative programs in the humanities.

Section I of the survey's questionnaires was designed simply to mirror the range of collaborative activities taking place at institutions selected for study. Thus contrasts between administrative and faculty perspectives are of little importance to this portion of the survey. For informational purposes however, let it be noted that the category of special events sponsored jointly by two or more humanities disciplines (i.e. lectures, performances, exhibitions, workshops) were selected by both administrative and faculty respondents as the most prevalent form of humanities collaboration at their institutions. 59 of 87 administrators (68%) responded that their institutions had jointly sponsored special events in the humanities, and 73 of 157 faculty (46%) reported the same information. Of the other forms of humanities collaboration listed on the survey, only one was reported to be occurring at the surveyed institutions by forty percent or more of responding administrators and faculty, and this was the teaching of courses cross-listed by two or more humanities departments. The least prevalent variety of collaborative activity listed in Section I of the survey happened to be joint faculty appointments in two or more humanities departments. 31 of 85 (36%) administrative responses indicated the presence of this collaborative type, while only 12 of 157 faculty responses (8%) indicated the same.

Section II of the survey focused on the factors influencing humanities collaboration and the relation between collaborative projects and institutional goals and priorities. Responses to questions in this section tended to stress the significant role of faculty in initiating and sustaining collaborative activities in the humanities, the benefit received by faculty from participation in collaborative projects, and the positive contribution made by humanities collaboration to the educational missions of institutions included in the survey.

One of the touchstone questions of the survey asked respondents to select the proper description of the importance of collaborative programs to the missions of their institutions. 65 of the 94 total responses of administrators (69%) characterized humanities collaboration as either crucially important to these missions or as making a significant contribution to these missions. 23 of these 65 responses were in the highest positive response category ("crucially important" to missions). 22 additional administrative responses selected the the third most positive statement in the answers to this question, "offer a useful supplement to traditional programs," thus boosting the overall positive response rate for the question (i.e. the sum of the three most positive response categories) to a hefty 87 of 94 total responses (93%).

Responses on the faculty questionnaire concurred with the administrative perception that humanities collaboration contributed positively to institutional missions. 54 of 156 faculty responses (35%) described humanities collaboration as "crucially important" to these missions, 61 additional responses characterized these activities as making a significant contribution (39%), and 33 responses (21%) rated collaboration a "useful supplement" to traditional program. The total positive response rate on the faculty questionnaire for this question was thus 148 of 156 responses or 95%. These results indicate a strong consensus of opinion among administrators and faculty alike concerning the importance of humanities collaboration to the structure of educations goals and values espoused by participating institutions.

Responses to other questions in Section II of the survey indicated some divergence between administrative and faculty respondents on a few issues. With regard to who benefited most from collaborative programs, for example, administrators designated faculty as the group for whom collaboration was "very beneficial" (42 of 82 total responses; 51%), while faculty selected students as the group most benefited (93 of 156 total responses; 60%). Administrators and faculty agreed that the single most important stimulus to collaborative work in the humanities was faculty initiative, but disagreed on the second most important stimulus. Administrative respondents selected the category of "administrative initiative" as second most important (25 of 99 responses; 25%), faculty chose "institutional tradition," though by a narrow margin (21 of 169 responses; 12%). A similar pattern of responses occurred in a question which asked respondents to identify the most important obstacle to collaboration among humanities disciplines. Both administrators and faculty chose lack of interest by faculty as the chief obstacle, but administrators described departmental rivalry as second most prominent obstacle (27 of 110 responses; 25%), while faculty ranked lack of funds for instituting or sustaining collaborative projects in second place (52 of 197 responses; 26%). Each respondent group also ranked support of participating faculty as the most important factor in insuring successful collaboration in the humanities, while once again differing on the second most important factor, administrators choosing the response option "cooperation of departmental administrators" as next in importance (31 of 155 responses; 20%), while faculty selected the option "support of academic dean" (28 of 254 responses; 11%).

What emerges from this pattern of results in Section II of the survey is the impression that although administrator and faculty respondents share a vision of what is most important, most significant, and most detrimental to humanities collaboration, they tend to part company when it comes to the full range of priorities which must be negotiated and dealt with in the development of collaborative proposals and programs over time. The divergence between administrative and faculty perceptions of secondary and tertiary priorities for collaborative projects suggests the possibility of misunderstanding and perhaps disagreement concerning the goals of collaboration and the means by which these goals may be accomplished. Ultimately, this undercurrent of divergent assumptions and perception could stymie implementation of a collaborative proposal or jeopardize the continuance of an existing program.

Section III of the survey concerned the attitudes of faculty toward collaborative work in the humanities. In general, results from questions in this section indicated strong positive attitudes toward collaborative projects on the part of humanities faculty participating in these projects, and essentially supportive attitudes on the part of non-participating humanities faculty and faculty from outside the humanities. To illustrate this point, a few specific results may be cited. When asked to describe the attitudes of humanities faculty participating in collaborative programs toward those programs, administrators perceived quite positive feelings among their faculty. 31 of 85 total administrative responses (36%) termed participating faculty attitudes as "enthusiastic," and 39 more responses perceived an interest equivalent to work in the primary disciplines of these faculty. Thus 70 of 85 administrative responses (82%) viewed the attitudes of participating faculty as essentially positive. Administrators also viewed the attitudes of humanities faculty not participating in collaborative projects and faculty outside the humanities as positive toward collaborative projects. For non-participating humanities faculty, the response rate for answer categories which described the attitudes of these faculty toward collaborative programs as significant and central to the academic mission of the institution or as useful variations on usual academic offerings was 47 of 88 total responses (54%), with six of these responses in the former (i.e. most positive) category. For faculty outside the humanities, administrators characterized the prevailing attitude as positive to the extent of seeing collaborative programs as useful variations on usual academic offerings (42 of 81 total responses; 52%).

In a related question from Section III, respondents were asked to characterize the influence of collaborative work on the "creative energies" of faculty participating in this work. Administrators termed this influence as stongly positive or positive in 77 of 87 responses to this question (89%), once more suggesting the positive faculty attitudes toward humanities collaboration perceived by academic administrators.

Compared to the favorable response rates recorded on the faculty questionnaire however, these administrative results seem pale. Participating humanities faculty reported their own attitudes toward collaborative work as enthusiastic or equivalent to work in their primary discipline at the impressive rate of 155 of 162 total responses (96%), and they described the contribution of collaborative work to their creative energies as stongly positive or positive in 153 of 159 total responses (also 96%). So overwhelming was the level of interest and satisfaction among faculty participating in collaborative programs toward these programs that it becomes possible to say that administrative respondents apparently underestimated the high regard for collaborative work which exists among faculty involved in interdisciplinary humanities projects and programs.

Faculty tended to view the attitudes of non-participating humanities colleagues toward collaborative programs at about the same positive level as that registered on the administrative questionnaire, with 106 of 179 responses (59%) attributing to their colleagues the view that collaborative programs are either significant and central to their institution's academic environment or useful variations on usual academic offerings. For faculty outside the humanities, results of the faculty questionnaire were somewhat less positive than those of the administrators' questionnaire, but still near the same level. 86 of 178 faculty responses (48%) characterized the attitudes of non-humanities faculty in terms of the two positive categories cited previously.

Section III of the survey also asked administrators and faculty whether they believed collaborative programs in the humanities were receiving adequate recognition and support from their institutions. Administrators responded affirmatively to this question by a margin of 51 to 32 (61% to 39%), while the affirmative margin for the faculty questionnaire was much narrowed at 83 to 76 (52% to 47%).

The final question of Section III represents another touchstone in the results of the survey, and it was posed only to faculty respondents. In this question faculty were asked if they believed that participation in collaborative projects in the humanities had advanced their careers (i.e. through promotion in rank, granting of tenure, and awarding of salary increases) at their respective institutions. Of the 162 responses to this question, 14 (9%) indicated that collaborative participation had advanced their careers to a great degree, 49 (30%) indicated careers had been advanced somewhat, 62 (38%) indicated faculty were not certain whether their careers had been advanced, 36 (22%) indicated participation had not advanced careers of respondents, and 1 response (1%) indicated that participation in collaborative work had actually hindered the career of a faculty member.

These results reveal that, regretably, 61% of the total responses to this final question of Section III of the survey view participation in collaborative activity as having no discernable effect on the advancement of faculty careers or, even more troubling, as having a negative impact on careers. This is so despite the fact that administrative and faculty respondents alike perceive collaborative programs in the humanities as making a clearly positive to strongly positive contribution to the educational missions of the institutions surveyed. Moreover, a large majority of administrators responding to the survey seem aware of the positive contribution made to the attitudes and creative energies of faculty participating in collaborative programs by those programs, as the results of a question in Section II make clear. Given this evidence of administrative regard for collaborative work, the perception among a majority of faculty respondents that collaborative work has not contributed positively to career advancement at their institutions is puzzling and troubling.

Some light is shed on this perception by comments both requested of and volunteered by survey respondents, faculty respondents in particular. A sampling of these comments will help define sensitive areas within the broad spectrum of collaborative activities, areas which hold the potential for significant tension between faculty and administrators.

Faculty questionnaires contained numerous comments indicating displeasure with the views of academic administrators toward collaborative proposals and programs. The following comment, appended to a faculty respondent's answer to the question on "obstacles" to collaborative work in Section II of the survey, is typical of the criticism leveled at administrators on the faculty questionnaire:

> The problem is not with the faculty, students, or even any inherent rivalry between disciplines. It lies in a sort of compartmentalized mindset of administrators, usually above the level of dean, that seems to go with jobs in high places or to grow out of these positions. Change of attitude is needed at the top--everywhere--in order to make these programs more successful.

A similar view was expressed by a faculty member who contended that "negative treatment by administrators that don't understand the Humanities" was a major factor in faculty unwillingness to undertake and continue collaborative work. This treatment, adds the same respondent, leads to a conflict of intentions: "Thus, while administration may encourage curricular change, they have created poor environments for change to be considered favorably."

Two factors which contribute to this perception of a negative environment for change and collaboration were repeated in several faculty comments. The first of these is what one faculty member called a "cash-nexus basis of all decision-making" and its application to collaborative programs. Faculty seem to distrust and resent decisions on support for collaborative work in the humanities which consider only the financial implications of a proposal or program. Some support for this faculty perception is offered by the number of times administrators, responding to a question which asked them to name what in their view were the most successful collaborative projects involving the humanities at their institutions, labeled their choices as funded by an external government agency or private foundation (e.g. "National Endowment for the Humanities-funded" or "Mellon Foundation-funded"). While this refrain was surely motivated in part by pride at being recognized by a prestigious outside funding source, there is just as clearly an intimation that collaborative projects are most worthy or most successful when they attract grant money to an institution. While the economic realities of higher education today encourage (even force) such a view in academic administrators, it is also true, as administrative responses to questions on the survey attest, that faculty initiative and support constitute the most crucial factors in the success of collaborative projects. Given this fact, an observation by one faculty respondent must be kept in mind in making decisions on support for collaborative projects: "I think funding is important to such programs, but I observe that money does not buy conversion of either students or faculty members."

A second factor which nettled faculty respondents considerably and is recorded in their comments on their questionnaires is the way in which collaborative work is counted (or not counted) in the calculation of work load. Comments to the effect that "there is no rubric for including team-teaching or independent studies in computation of usual course load" were prevalent on faculty questionnaires. A few faculty commented that, under pressure of a work load that contained no credit for collaborative efforts, they had abandoned interdisciplinary interests: "I tried to institute an interdisciplinary, team-taught course," wrote one respondent, but "because we could not get the administration to approve full-teaching credit for each instructor, I have discontinued pursuing the idea." Another respondent wrote of "heavy teaching/grading loads. . .and heavy committee loads" which made it difficult for faculty to "respond favorably to new demands on their flagging energies." From comments such as these, it appears clear that until some means is found to consistently and fairly recognize work in collaborative programs as part of a "regular" teaching load rather than viewing them as a necessary "overload" or peripheral activity, many institutions of the type participating in the survey will continue to be perceived by their faculty as poor environments for interdisciplinary humanities collaboration.

This inference must be tempered by the fact that faculty respondents also commented on problems traceable to the attitudes and behavior of their faculty colleagues and the fact that a few respondents actually praised the enlightened and supportive attitudes of academic deans. On the subject of faculty colleagues, comments cited two basic problems, skepticism about the value of interdisciplinary study on the one hand, and friction among collaborating faculty on the other. One respondent observed, for example, that "specialists in the Humanities. . .rarely make good generalists or synthesizers, though they think they do," and another reported encountering "philosophical rejection of interdisciplinary learning as superficial and hostile to authentic learning" among colleagues. The issue of compatibility among participants in a collaborative project was also mentioned by several respondents. In one instance, a respondent reported an experience in which "one teacher saw it [i.e. the collaborative program] as competitive teaching, so tried to win the hearts of students with little concern for their minds or content." Another faculty member proposed "two necessary ingredients" for successful team-teaching in collaborative programs: "1. an acknowledged leader in group; 2. personal compatibility among the group." A neat summary of the key role of faculty attitudes and compatibility in collaboration was provided by the following comment:

> Success or failure of collaborative efforts is solely a function of the individual faculty members involved. Good ideas in the wrong hands can fail. Less than good ideas in the right hands have a mysterious way of succeeding.

Several faculty comments complimented the contributions of academic administrators to collaborative work. Two respondents described an administrator at their institution as the "best student" or "most conversant participant" of a collaborative program. Comments on the administrative questionnaire generally cite faculty reluctance to undertake interdisciplinary work or narrow training of faculty as crucial obstacles to collaboration from the perspective of a dean. But two particular comments from the administrative perspective are noteworthy because they clearly communicate the fact that academic administrators have specific responsibilities with regard to collaborative work. One dean acknowledged the need for administrators to "free faculty from departmental courses to work cooperatively," while another described his role in collaboration as "continually educating new faculty members in the value of our humanities program." The latter comments match well a faculty comment which includes a description of the ideal role of an academic administrator in relation to collaborative humanities programs:

> Therefore, college administrators should make it clear to young faculty that they value interdisciplinary work, and that such work counts toward tenure and promotion.

Reading the many comments concerning collaborative projects which administrators and faculty appended to their questionnaires, I was struck by the degree of candor and the level of insight possessed by those who responded to the survey, and I would like to illustrate this impression by quoting two final comments. The first set the issues of the survey into a historical perspective, one no doubt based on the respondent's own experience:

> In the 1960s. . .collaboration and interdisciplinary attitudes developed rapidly. With the financial crunch of the 1970s, the climate shifted sharply to a climate of narrowly department-centered survival. In the 1980s the climate is again favorable for collaborative efforts, especially as younger faculty come into our institution. . .administrative support for the faculty impulses has been a crucial factor in altering the climate of the 1970s.

This comment portrays what might be called the "macroenvironment" of collaborative programs in the humanities today, and it accurately defines the basic variables which influence the success and survival of interdisciplinary efforts in any time period: financial resources, breadth of vision among faculty, and administrative support.

A second comment portrays the "microenvironment" of collaborative work, the feelings and ideas of individual faculty who participate in interdisciplinary study and teaching:

> When I came to __________ University, I did not think that interdisciplinary programs would help me in my own work; I did view such interests as draining my attention from other vital work in my discipline. This has turned out to be completely unfounded as a fear. I credit my colleagues for this recognition in me. They have certainly been an education in themselves.

Taken together, these two comments imply the potential of collaborative projects as opportunities for faculty growth and development, and they convey the sensitivity of these projects to an array of factors operating in the larger arena of higher education as a whole and in the specific climate of a particular institution. Collaborative ventures must learn, so it seems, to correctly assess and appropriately respond to changes in these environments if they are to succeed in fulfilling their considerable promise as avenues of individual and institutional growth.

As a portrait of faculty and administrative attitudes and perceptions, the survey I have described in this presentation suggests the existence of broad agreement in principle between the two respondent constituencies in regard to the value of collaborative work in the humanities. Where significant differences of opinion between administrators and faculty exist in the results of the survey, they were most likely to occur on issues such as the level of benefit received by faculty participating in collaborative programs (administrators having underestimated this benefit) and the extent to which this participation has influenced the professional development of humanities faculty. On the subject of collaboration's relation to institutional organization, administrators identify the success of interdisciplinary programs with cooperative and mutually supportive relations among deans, departmental administrators, and participating faculty. Faculty, though generally subscribing to this interpretation of the dynamics of successful collaboration, see institutional tradition as playing a significant role in developing and maintaining interdisciplinary programs. The single most crucial indicator of the divergent perspectives of administrators and faculty is the perception by a significant percentage of humanities faculty that their collaborative work is not appropriately recognized and rewarded in evaluations of performance and advancement of careers at their institutions. If I were to select a single message from the results of the survey to emphasize in bringing this presentation to a close, it would be the need to assure (or reassure) faculty participating in collaborative projects and programs that their efforts will be properly recognized in assessments of performance by institutional authorities and review bodies.

Closing the perceived gap separating the level of personal and professional satisfaction derived by faculty from participation in collaborative projects on the one hand, and the level of institutional recognition and reward granted for such participation on the other could improve the overall climate for collaboration among humanities disciplines and faculty at institutions sincerely interested in enhancing the vital relation between humanistic studies and the traditional missions of undergraduate education.

A COMPUTER NETWORKED ENVIRONMENT FOR DEVELOPING COMPOSITION AND MATH SKILLS

Steven Alford and Barry Centini

Abstract

Supported by the State of Florida, Nova University is developing an innovative undergraduate Liberal Studies Program. The program is committed to curricular innovation with an interdisciplinary approach to traditional academics and an individualized, computer-based environment for learning mathematics and composition. The hardware, software and educational strategies used to deliver the math and composition skills are described by the system's developers.

An "ethernet" Local Area Network will give each student access to a Unix* -based environment of computer-managed instruction and application programs. A series of C programs for monitoring student progress, directing computer assisted instruction, and allowing for "real time" interactive instruction with up to 22 students have been developed and will complement audio, video and tutorial learning modes. Microcomputer software for aiding math instruction will be coordinated with online tutorial programs and Unix-based application programs. Composition students will learn to coordinate Word Processing and uploading skills with the Writer's Workbench software output.

The Center for Computer Based Learning at Nova has been delivering online graduate programs for the past five years. The need for developing individualized math and composition continuums has prompted the use of this technology for undergraduate education, with the hope that other parts of the new Liberal Studies Program can eventually become part of this online environment.

Networked Computer-based Learning at Nova

Entire organizations are being redesigned with "information" as the core structural concept (Penrod, 1983). With the development of systems like "Andrew" at Carnegie Mellon

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* UNIX is a Trademark of ATT Bell Laboratories

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University (Morris, 1986) the use of networked computers to take education out of the classroom and into the home and dormitory will increase dramatically. In a previous presentation at the Conference on Non-traditional-Interdisciplinary Programs (Centini, 1986) the authors described Nova University's use of personal computers, the TYMNET packet switching network, and a Nova campus-based VAX 11/780 running Unix (Berkeley 4.2) to deliver graduate-level programs in Information Science, Training and Learning, Computer Science, and Computer Education. Several hundred students (from 23 states and Canada) pursue their coursework through telecommunication links.

The electronic tools that enhance computer-based learning include:

- o electronic mail
- o teleconferencing
- o relational database management systems
- o analytical writing packages
- o statistical packages S and SPSSx
- o simulation languages
- o electronic spreadsheets
- o course authoring systems
- o language compilers and interpreters
- o Unix information management tools

Standard Unix tools satisfy many of the students' requirements. However, continued efforts to meet online students' needs have provided enough challenges to warrant unique software development. Using Unix shellscripts and C programs, the staff produced the following software tools:

1. ecr -- The "electronic classroom," an interactive learning environment that can accommodate up to 24 students per classroom. The design and application of this program have been discussed elsewhere (Scigliano, 1987).

2. electronic management tools -- A whole series of programs have been developed for filing student work and keeping track of progress. A system, "electronic student," allows automatic storing and record keeping, with proper student/instructor notification, to be in effect at all times with minimum supervision. A "grader" program allows instructors with minimum computer expertise to read assignments and make comments, select sections of text for discussion, and mail all their critiques to the student.

3. electronic curriculum guides -- Menus, tutorial drivers, tutorial expert systems, and other student aids have been designed so students can choose the level of "system help involvement" and find the electronic learning style that best fits them.

The Liberal Studies Program

In 1988, Nova University, a privately owned educational institution of higher learning, in concert with the State of Florida, began its Liberal Studies Program for undergraduate students. The Liberal Studies Program provides a coherent curriculum designed to be completed in three calendar years. Students and faculty focus on five thematic units of the program's ten interdisciplinary areas during the first year. Most of the student's scheduled time in the first year will be spent on these units, so the necessary math and writing competencies will be developed during "open" time using technology-based instruction managed by the software described above.

The core of the Unix environment designed to deliver the competency instruction will be a Sun Microsystem 3/280S file server with 575 Mbytes of hard disk storage running sun operating system version 3.5. Several Sun 3/50 monochrome diskless workstations and a Sun 3/60 color workstation will be used for courseware design. The Sun server and work stations will operate on an ethernet with a gateway to DEC VAX 11/780 machines in other locations around the campus. Also connected to the ethernet will be PostScript equipped laser printers and other peripheral devices to allow maximum use of networked facilities. Software will include release 2 of the Carnegie Mellon University ANDREW System and the CMu Tutor authoring system. In addition, the system will include C programs for real-time online instruction (ECR) and computer management programs written in shellscript and C by Nova staff and faculty. A set of pilot student workstations will be equipped with CD-ROM and interactive video systems.

Math Competencies

The mathematics competencies expected of all students are generally grouped into courses such as: Basic Mathematics, General Mathematics, College Algebra, Precalculus and Calculus. The hierarchical set of competencies in these separate courses have been fused into a continuum that will be presented as a mastery learning sequence, with learning the constant and time the variable. Students will work in both traditional settings (large group, small group, tutorial) as well as technology-based settings. The following matrix shows the eight options available to each student for every module:

Math Continuum Learning Matrix

	Individual	Small Group	Large Group
Non-TBI*	Self-tutoring	Small group/Lab	Lecture
	(1)	(2)	(3)
Analog	<------- Audio/Videotapes, Films/Slides------>		
	(4)	(4)	
Digital	CAI	Online Conference	ecr**
	(5)	(6)	(7)
Digital/ Analog	<--Interactive Video, Simulations, CD/ROM --->		
	(8)	(8)	(8)

* (TBI == Technology Based Instruction)
**(ecr == "electronic classroom")

Twenty three competency modules have been identified, and individual "learning packages" will be developed for each module. Students will be tested for basic math skills, specific skills (related to each module) and learning styles. An individual program of learning (with opportunities for group learning) will be developed based on the eight options of the learning matrix. Progress will be tracked through computer management programs written in C for this Unix-based environment. These programs will monitor student progress through the continuum and provide direction through diagnosis, prognosis, remediation, and enrichment.

Wherever possible students will be grouped for team learning and lectures, but the emphasis will be on acquiring specific competencies through an individualized computer environment that is part of the ethernet LAN. Students will login regularly for news of tutorials and lectures, peer help, information about other students, and directions for CAI, interactive video, etc. The following menu demonstrates the options available to each student:

```
**********************************************************
*  Nova College - Liberal Arts Program - Math Continuum  *
**********************************************************

               1.  Overview -- Rationale
               2.  Pretests -- General and Specific
               3.  Individual Modules [1-20]
               4.  Calendar of General Lectures
               5.  Small Group Sessions
               6.  Tutorials (Math Lab)
               7.  Counselling (Math Lab)
               8.  Tutorials (Online)
               9.  Counselling (Online)
               10. Information about students

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This menu shows the basic mix of online and "live" interaction between the students and the system. Items 1-7 are available online and in hard copy, while items 8-10 are only available online.

Writing Competencies

The Liberal Studies Program Composition sequence has been planned to respond to several common problems associated with traditional composition programs: 1) the inherent passivity and lack of motivation in the student, who feels "imprisoned" in the composition class, and must "serve his time" until the term's end, 2) the lack of integration of acquiring composition skills with students' other studies, 3) the lack of significant engaging literature to which the student can respond (instead we have "readers" that vary widely in quality, and few have selections that are intellectually valuable, intrinsically interesting to the student, and lengthy enough to provide a legitimate academic experience). Basing our program on competency rather than time, and using currently available technology, we have sought to eliminate these common problems from students' experience in composition.

For the past two and one-half years, Nova students have used wordprocessors, the Writer's Workbench, and other Unix-based tools to prepare their work in composition classes (Alford, 1985). Based on that program's success, Nova College's Liberal Studies Program will further integrate writing instruction with currently available computer technology, as well as videotape presentations and conventional lectures.

For the first three to five weeks students will be instructed how to use a word processor, how to upload and download files on the UNIX system, how to access and use Writer's Workbench on the UNIX operating system, how to use electronic mail, and how to use Electronic Teacher/Student (see "electronic management tools," above) Thereafter, all written work at Nova College will be done on a word processor, run through Writer's Workbench, and where appropriate, elmailed to the teacher.

Students will also be supplied with written manuals, as well as have access to videotapes that reinforce the classroom instruction. In addition, each student will have a composition program manual that will outline the competency-based requirements for the program. As soon as the student is ready, he can begin sending assignments to the teacher. Hence, due dates for papers can be modified to mean "final" due dates. When a student elmails a paper to a teacher, the teacher can then evaluate the student's work and make the next assignment. Thus, 1) students will know, going into the course, what will be required of them to exit the course, 2) students can proceed at their own pace, and 3) one hopes, teachers will not be beleaguered by periodic piles of papers.

Given this structure, classes will not be held the customary two or three times a week, but will be held as needed to discuss problems common to all student work. The teacher will act as one who responds to individual writing problems (hopefully by pointing to the relevant in the grammar book). Instead of lectures, if a recurrent problem exists, the teacher can elmail instruction. In addition, the teacher can be available on the electronic classroom (ecr) developed here at Nova. If the teacher has prepared files for problems that will be expected, this can be done will little ongoing effort by the teacher. When several students exhibit the same writing problem, using elmail the teacher can then schedule a class with just those students. Hence, a "class" will not consist of students in units of fifteen or twenty. Instead, each teacher will have a teaching load of approximately sixty students. As each writing problem arises, those students with specific problems will meet with the teacher in a classroom. Each meeting, then, may well consist of a different configuration of students.

Based on a hierarchy of skills: summary, narration, description, exposition, argument, and research, students will write papers targeted to identifying and developing these skills. These papers' topics will come from the area of study the student is currently in. For example, the student will be assigned to write a 100 word summary of a 1000 word piece, but the nature of that piece will be determined by the study area, not by a composition reader.

Periodically, (at the end of the school year or every two years), all students will be assessed on their knowledge to date, not on a course by course basis, but through holistic evaluation that will involve writing. Students' writing skills will be assessed as part of that procedure. Students whose skills fall below expectations will return to the composition sequence, at a place based on their identified weaknesses, regardless of whether they have passed out of the sequence earlier. Hence, at any time any student can be asked to return the composition sequence to work on a writing problem. By the senior year, writing skills should not be a problem.

Placement and competency evaluation: Students' writing competence will be evaluated three times during their academic career: on entry into the college, during the year-long language course, and during the comprehensive examination (mentioned above). We will examine each one of these.

Students' entry-level skills will be evaluated by Nova's Learning Resource Center using the TSWE (Test of Standard Written English). In addition to identifying remedial students, the Learning Resource Center will use the TSWE to provide instructors with a profile of each student's strengths and weaknesses.

Nova College can depend on full-time composition teachers to assess students' skill levels. However, to pass from one competency level to the next, a student's essay will be read by three readers. If two of the three readers "pass" the student, he will be allowed to move on to the next level in the skills hierarchy.

Finally, periodically students will be required to complete a comprehensive examination that reflects their ability to synthesize and apply the knowledge and skills they have acquired. One of the purposes of this examination will be to assess students' writing skills, which will be evaluated holistically.

Conclusion

Our several years experience in developing and using a computer-networked learning environment will enable us to allow Liberal Studies Program students maximum individualization with an adequate degree of direction and control. Our experience in the preceding years has taught us several lessons

1. Online learning does not work identically for all students.

2. The UNIX environment must be modified regularly through systems programs to allow staff and faculty to adapt to changing student needs.

3. Faculty must have both traditional classroom skills and computer competencies.

4. Live interaction with the student is essential.

5. Development of expert systems to facilitate classroom management and provide prompt response to students is a necessity. The live nature of online learning has fostered student expectations for teachers to handle assignments and other course correspondence quickly.

Given these lessons, the needs of the online environment and methods of attaining them are:

- quick and direct response to student questions

    - online tutorials
    - online CAI
    - graduate assistant tutors
    - online "student help" database
    - electronic mail response
    - live interactive response

- students must communicate with other students and faculty continuously.

    - the system must be "up" and responsive
    - automatic response system must be available
    - continuing updates on "dailynews" must occur

- modifications to assignments and requirements can be made instantaneously

    - assignments must be modular
    - core assignments with options are necessary

While many educators may criticize the "computerization" of education as anti-humanistic, careful integration of computer technology into existing disciplines can enrich curriculum management and course pedagogy. Second, networking individual microcomputers can allow students to interact with both faculty and fellow students at will, rather than waiting for an appointed time for instruction and communication. Third, educators are only recently realizing that an online environment does not supplant campus space, but instead creates an additional space in which students and faculty, and information resources can interact. "Cyberspace," the preserve of science fiction writers, has arrived on campus.

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TEACHING INTRODUCTORY HUMANITIES ON CROSS-CAMPUS TELEVIDEO

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Introduction

For the last several years the presenters have discussed and developed ways of teaching limited-enrollment courses cooperatively across three smaller community college campuses. These efforts initially focused on music and the foreign languages. Our professional orientations, while somewhat different, found common ground in this interest in bringing together skills in the liberal arts and in communication technologies. While our involvement in earlier cross-campus courses was administrative, we decided to pool our backgrounds and team-teach an introductory humanities course, to experience televideo teaching first-hand and to see if students could be stimulated to share our appreciation of the humanities in this unorthodox instructional format. In constructing and delivering our course, we were compelled to address the technology, the most appropriate instructional content, and a new instructional process. The many things we learned about instruction in this medium will help us administer and teach more effectively.

Technology

Each of our campuses has a lab in which are installed the following: Quorum Microphone, photophone (with camera, disk drive, and thermal printer), two black-and-white video monitors, music playback system, and conventional telephone system. The Loudoun Campus also has a Gemini Blackboard System. The elements in this system are connected by conventional telephone lines, hooked up directly, not through campus switchboards.

This combination of equipment allows instruction to originate from any of the three sites. The Quorum Mike picks up the strongest audio signal at any site and transmits it to the other two. This allows natural dialogue to ensue without flipping switches between "send" and "recieve" modes. The mike also equalizes volume, so that a soft voice from a far corner of the room sounds just as loud and clear as a booming voice close to the mike.

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The Photophone is a versatile transmitter and receiver of black-and-white images. It sends a complete image every seven seconds, so that continually updated pictures can be sent, though not continuous "live" images. The unit is equipped with a miniature camera that can be focused on print materials as well as the whole room. It is also equipped with a 3 1/2" disk drive that will store a sequence of images, allow them to be rearranged or deleted, and transmit the desired images at fixed or variable frequency during an instructional session.

The Gemini Blackboard, situated at one of our sites, allows handwritten material to be projected on a video monitor at the other classrooms. It is the exact electronic equivalent of the traditional chalkboard, except that it does not screech when you scrape your fingernails on it.

The individual pieces of equipment work well together. What caused most of our significant "technical difficulties" was the telephone connections. Our three campuses are situated so that they cut across two telephone company jurisdictions, and many of the connecting hookups are through older rural equipment. (At the Manassas Campus, the telephones frequently malfunction during and after heavy rainfall.) The college originally insisted that we use trunk lines running through campus switchboards. These soon proved to be of insufficient quality for the transmission of images, and eventually the college agreed on dedicated lines, as we had originally advised them would be needed. Furthermore, when the system went down, the telephone company checking out the problem invariably ascribed it to the other company. In addition, the state Department of Telecommunications was very anxious that we use their Richmond-based bridge. However, despite some very helpful and well-meaning people, the bridge was frequently disrupted for maintenance and other routine purposes without regard for our instructional schedule, so the system would crash just as we were trying to establish a hookup for a class. Eventually a local bridge was found. But ironing out what should have been routine hookup problems cost hours of diplomatic dialogues and countless amounts of energy fighting the frustration as precious instructional time was lost. Mr. White was the point man in these efforts.

One other ongoing technical problem was the background noise caused by the air circulation system at Manassas. It was loud enough to trigger the Quorum Mike, effectively shutting off incoming signals to Manassas most of the time. By the time this problem was discovered we had spent months trying to identify the difficulty as an equipment problem. The solution was to put padded walls in the Manassas televideo room--simple in hindsight.

Content

The three of us confered at length about the best kinds of materials to use in an introductory humanities course. We agreed that a generic and values-oriented approach was better than any chronological or other arrangement for a ten-week quarter. Since Dr. Frantz specializes in philosophy, Mr. White in music, and Dr. Bradford in the visual and literary arts, each of us took on principal responsibility for three weeks focused on his area of expertise.

We determined that our course would concentrate on two questions: 1) Is the will-to-order and the need for personal orientation fundamental in the human make-up? 2) How can the liberal arts provide skills thjat enhance career opportunities and involvement within one's community?

Pursuing such an approach to humanities, and seeking to illustrate the interlocking fabric of the liberal arts, we found a dearth of textbooks that addressed both the more conceptual arts (philosophy, literature) and the more sensory (visual arts, music), as well as the issues of human values. We were challenged to develop a coherent approach for students with minimal humanities backgrounds, within the brief time of the academic quarter. We finally decided on the Greenfield, Murray, Tesh text *An Introduction To The Humanities* (Dubuque: Kendall/Hunt, 1984). It covers conceptual and sensory genres, and offers a University Prints supplement for its visual chapters. Each instructor, however, developed supplementary materials that were designed to point toward the questions stated above, and to integrate and illustrate more effectively. Dr. Frantz, a poet, crreated haiku-like verse with imagery that evoked the questions about new thinking, social ethics, and spirituality that he wished to address. Dr. Bradford focused on materials for the literary arts, largely unsupported in the text. And Mr. White created numerous musical examples and listening samples.

Working in close communication, and with a common set of purposes and objectives, each instructor created his own syllabus for his three weeks of the course. A final integrating exercise in the tenth week provided a touchstone for focusing on the perspectives achieved by each student and each instructor.

The challenge to develop and integrate course materials was one of the most satisfying and productive elements of the course for us, since we needed to think through carefully not only our own objectives and strategies, but also those of our colleagues.

Instructional Process

Teaching a televideo course in the humanities for the first time is a humbling experience. No amount of pre-planning can prepare the instructor who has spent a lifetime in the lecture/discussion exchanges of a traditional classroom for all the vagaries of the new medium.

Eye contact is the first thing we missed. We had all been trained since college to believe that *real* learning was based on the paradigm of the teacher on one end of the log and the student on the other. Now it was not a log but a long and very glitchy phone line that separated me from some of my students. We couldn't see their expressions more than once every seven seconds in a frozen, slightly blurred black-and-white image, we couldn't associate a voice with a face, and couldn't read the gestures and expressions of insight, frustration, reflection.

To overcome this we developed a series of special compensatory actions, all intended to involve students in the processes of the class: we asked each campus to send out a "group photo" at the start of each class meeting, both on the screen and on the thermal printer; we spent a few minutes in informal conversation to get to know students at the other campuses better; we developed an almost baroque flair for the dramatic to compensate for the emotional distance of the medium; we were careful to solicit feedback, questions, and individual responses to check understanding and involvement; we defined terms clearly, prepared well-structured class plans and followed them reasonably closely.

As some of these procedures imply, spontaneity was another element in the academic dialogue for which we had to find special compensations in the televideo medium. This was very difficult, and emphasized the fact that students in the room from which the class originated did have an advantage. At the same time, their immediate interaction with the instructor provided a dimension of intimacy and immediateness for all the students. And since each of us took turns teaching the course from our campus, each set of students got an equal turn at being the "live" group.

Both the teacher and the students had to become technicians on a level undreamed of in the teacher/student/log ideal. The technical problems described above forced frequent impromptu revisions in our instructional plans, and required us to acquire more electronic expertise than we began with: managing phone connections, doing microphone hookups, troubleshooting. Sometimes the solution was the presence of an audio/visual technician, but not all campuses had the personnel resources to supply one. Otherwise the instructor had to shift for himself or pray for an electronically-oriented student. The reliability and power of the technology were not sufficient for the instructor to rest easy and work solely on the academic task at hand.

Written communication provided another challenge to effective interaction with our class. Regular written assignments were especially important as a way of evaluating student involvement and comprehension with the issues of the course. But they couldn't just hand in their work at the beginning of class and be sure they'd get it back next week. While we do have an inter-campus courier service, its operation often makes the U.S. Mail seem a paradigm of speedy delivery. And just to get the papers in the courier service required extra effort from faculty, students and office staff. Inevitably a day would be lost here and there, preventing even reasonably prompt instructor response to student writing. Consequently we never got to feel that we "knew" our students intellectually during the segment of the course we taught; only in retrospect did we recognize and appreciate the unique conceptual personalities. And then it was too late for much interaction. Nevertheless, each of us made an effort to comment on and return student written work as quickly as possible, to minimize this disadvantage.

The communication among instructors, always important in team-taught courses, was crucial in the multi-campus televideo mode. Before, during, and after the course worked closely. First we designed the course together, conceiving it as three relatively independent modules so that responsibilities would be clear and preparation activities managable along with our many administrative responsibilities. During the course we made it a point to sit in on some of each other's sessions, to keep abreast of content, student performance, and our colleagues' points of view. We were all there for the first class, and for the last, which took the form of a joint instructional session and a jointly administered final exam which we had devised together. After the final, we met to discuss student performance and assign final grades.

Conclusions

1. The instructor of a televideo course must develop a special orientation. He/she must be a dramatic performer, must deliberately work on special communication techniques, and must aggressively seek the dialogue and spontaneity that come naturally in the classroom.

2. The instructor must prepare each class well in advance, emphasizing a tight formal structure and prepared visual images for video transmission. There is less flexibility, fewer opportunities for improvisation, in this medium.

3. The instructor must also be trained thoroughly before the course begins as a technician. He or she must have the skill requisite to adjust complex phone lines and equipment hookups in case of failures, and to do so efficiently enough not to lose instructional time.

4. The instructor must be unusually meticulous about administrative details, because small glitches can result in significant lapses in communication.

5. All students need some immediate contact with the instructor. If there is not a team-teacher on each site, the faculty member must rotate the tramsmission site if possible, or assistant instructors must be on hand everywhere. An informal social event before or after the class would also help students feel more at home with each other and with the instructors.

6. The equipment and line problems, the numerous required compensatory strategies, the constant demand to be in communication--in short, the need for humanists to struggle with technology in order to remain humanists--make televideo courses desirable when needed but only when needed. However, when there is a choice between televideo and no humanities instruction, the choice is clear. Televideo is a way to extend the humanities to places they would not otherwise be.

TEACHING TECHNICAL WRITING ON TELEVISION TO NONTRADITIONAL STUDENTS

CYNTHIA DAVIS

Instructional telecommunications in adult education are here to stay. Despite resistance by teachers and administrators, institutions are realizing that two major barriers to adult participation in education---situational and institutional barriers---can be eliminated through the use of telecommunications. (Cross, 99) Adults' problems with time constraints, childcare, home and job responsibilities, physical handicaps, transportation, registration red tape, attendance requirements and course availability can be at least partially solved if an institution is willing to change its delivery systems to include some distance education. Educators must become sensitive to the variability of adult learning styles and to the transitions in adult lives: a willingness to experiment with telecommunications is a realistic way to do this.

As English instructors who use telecommunications to teach technical writing to adults, my colleague and I face several challenges:

1. To understand and use creatively the technology of interactive television.
2. To employ principles of adult learning and motivation theory.
3. To overcome communication interference.
4. To respond to individual and corporate needs.
5. To teach job-related writing skills.

We teach as a team and deliver our course to 20 on-site students and 20 off-site students located at various high tech companies and government agencies in the Washington, DC area. Because we feel that television is particularly appropriate for teaching technical writing to adults, this paper was written to share some ideas and techniques with others who might be less sanguine about the new technologies.

Overview of Instructional Telecommunications

Instructional telecomunnications are not, of course, new. Some institutions, like Chicago City College and Penn State, were pioneers in the field ever since the inception of televised instruction in the 1950's. Today there are many educational

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systems which, like the Texas College and University system, have made a strong commitment to telecommunications. In addition to universities' use of the medium, nonformal and extension programs for adults deliver 80% of their programs to rural clients through telecommunications. (Barker, 5)

Unfortunately, the United States, once in the vanguard of instructional television, has not kept up with countries like Canada, West Germany and Great Britain, whose Open University is, of course, a model for delivering quality distance education to adults. One reason for this decline is that our decentralized educational system does not permit the kind of uniform, advance planning for television programs that is possible in a centralized organization. Another reason is that the United States differs from most countries in that none of the domestic stations reaching the general public is owned or operated by the federal government. (Hilliard, 1) In contrast, West Germany has nine regional or state broadcasting corporations and two state television channels.

Despite our decline in educational telecommunications, adults are not averse to learning from television. Carbone reports that "nearly one in ten adults is motivated by television viewing to engage in some further learning activity, and that...television is indeed a significant generator of participants for adult learning programs."(185) Howe, in studies of British adults, says that television succeeds as a delivery system because "it is a familiar medium to the user, convenient and easy to use, and is usually associated with pleasurable experience through its power to attract and entertain."(59) Cross corroborates this positive attitude, citing a 1979 survey of California adults in which 80% planned to take a second television course.(210)

As adults realize the vocational and continuing education benefits associated with television, and as more employers provide or sponsor educational opportunities, television will be increasingly perceived as a time and cost effective way to combine work and education. Edmundson points out that in 1984, 43% of all adult education was job-related.(3) He cites the growing trend for corporations to contract with universities to deliver customized training and management programs. The educational partnership between Hewlett-Packard and California State University/Chico is almost exclusively based on telecommunications. The University of Maryland also tailors courses to the needs of its clientele. The classes can either be watched live, or taped to be shown to other employees at a later date. Sharing a common learning experience is one way to reinforce company goals and enhance employee morale.

Resistance to Telecommunications

Given this positive background, why have not American educators embraced the new instructional technologies with more enthusiasm?

Why have so many research studies been devoted to discovering whether adults learn "more" by television. Such research questions are similar to those equally pointless ones which try to determine if word processors help students to write better. After all, we did not demand of the telephone that it help us talk better! Granted, the expense of installing or using telecommunications has generated a concern on the part of administrators that the medium be proven effective, but although we should certainly be asking questions about telecommunications, perhaps we have been asking the wrong ones.

Hershfield acknowledges cost as a legitimate concern, but maintains that the major reason why some telecommunications systems have proven to be expensive failures is lack of strategic planning. Without planning, "large amounts of money are wasted and civic and government leaders as well as potential clients are disappointed and become so disillusioned that any mention of "distance education" or "telecommunications" is greeted with derision."(unpublished speech, 1987) Budgeting for software and staffing is often overlooked, while expensive equipment like transmitters, satellite down-links and elaborate production studios are put in place before any real analysis of educational needs and delivery possibilities is done."(1985) Key decisions, therefore, should be educational, not technological.

Administrators are not the only educators hesitant to employ new technologies. Much resistance comes from teachers. Hilliard points out that everyone's faults are magnified in front of the camera. A slow speaker becomes monotonous, a fast speaker incomprehensible; jokes can fall flat; lack of preparation cannot be covered up. There is also an unnerving loss of control associated with the fact that one cannot be sure who is watching: we have occasionally been told by students that supervisors or managers stopped in to watch our class. Teachers also resent having to tailor their styles to the medium: there are special techniques to learn for writing on the board, moving around, speaking clearly. Even clothes must be chosen carefully: a loud tie or striped dress will make students dizzy; unrelieved black or white are highly unflattering; mohair sweaters make the microphone crackle. Teaching live, on-camera is far from most teachers' goals.

The University of Maryland ITV System

The University of Maryland Instructional Television System (ITV) broadcasts from four studios in the College Park Engineering Building to eighteen companies and government agencies in the greater Washington area. The program is directed toward full-time employees seeking graduate and undergraduate degrees. Corporations pay a subscriber fee which ranges from $20,000 to $100,000, depending on the number of students and the type of services provided. Students also pay a tuition fee which, in some cases, is absorbed by the employer. Six of the 50 courses offered this term are beamed throughout the United States and Canada via the National Technological University's satellite system (NTU).

Communication Theory

As Hilliard points out, we need more research on how adults learn most effectively through telecommunications, and we then need to optimize this learning for different skills and knowledge transfer.(215) Barrow's theory of audio-visual communication posits that there are two kinds of interference in any type of telecommunications: whatever distracts from the message (Type I) and whatever conceals the message (Type II). Examples of Type I interference would be noise, technical difficulties, equipment failure or poor teaching or television skills. Examples of Type II interference would be difficult vocabulary, poor explanations or inadequate graphics. The effectiveness of a message or a television lesson is a function of these two factors. (Schramm,229)

To overcome Type I interference, a communicator must control the relative potency (Po) of a message. To overcome Type II interference, a communicator must regulate the relative comprehensibility of message (Co). Po signifies the degree to which a message holds a reader's attention, while Co signifies the degree to which it is understood.

According to Barrow, Po is determined by the subject's attention to the message, divided by his or her total possible attention. Co, on the other hand, is the total concepts understood, divided by the total concepts presented by the teacher. These relationships can be expressed as follows:

$$Po= \frac{\text{Attention to Message}}{\text{Total Attention Possible}}$$

$$Co= \frac{\text{Total Concepts Understood}}{\text{Total Concepts Presented}}$$

While all teachers have to cope with both Type I and Type II interference, the television teacher has more initial distractions to contend with and must exert more energy to maximize the Po, or the student's attention span, before the instruction can begin. Part of the hesitation on the part of some teachers to instruct on television may be due to a perception that the attempt to overcome Type I interference is too overwhelming and detracts from energies which the teacher could expend on instructing and explaining content.

Theories of Adult Learning and Motivation

Motivation is an essential component of any learning activity. For adults, personal goal setting and self reinforcement provide the impetus toward educational activities. By understanding adult learning and adult motivation, the teacher of adults can match teaching style, content and delivery to the needs of the learners.

Hilliard (30) suggests eight reasons why adults are motivated to enroll in telecourses:

1. The desire to learn for the sake of learning.
2. The desire to reach personal goals.
3. The desire to interact with others.
4. The desire to improve society.
5. The desire to escape one's environment.
6. The desire to study alone.
7. The desire for intellectual security.
8. The desire to improve job skills.

These motivations are not, of course, limited to telecourses; they could be applied to any adult learning activity, but they do provide a starting point for planning and designing television courses for adults.

Blackburn has also compiled a list of principles of adult learning. These, too, are not exclusive to telecommunication instruction, but they can provide a framework for organizing learning activities. Blackburn's principles are:

1. Adult learners' abilities vary, and provision must be made for different learning speeds.
2. Environment shapes the adult learner's progress.
3. Adult learners' anxiety levels determine the kind of encouragement needed to learn.
4. Adults' long-range goals influence short term activities.
5. Group atmosphere or ambience affects both the level of satisfaction and the learning product of adult learners.

Teaching Technical Writing on Television

In planning and delivering technical writing classes, one should take into account the principles of adult learning described by Blackburn and Hilliard, as well as the constraints imposed by both types of interference with communication, as posited by Barrow. The discussion below will related Blackburn's principles to techniques and activities which have been found to be successful in technical writing classes.

Blackburn states that adult learners vary in their abilities, and that an educator must be sensitive to these variations. One criticism of television is that it moves too quickly for some learners: the statement is made and the moment is gone before the student has absorbed the information. One way a teacher can counteract this is to consciously pace the presentation more slowly than would be the case in a live situation where the students' facial expressions provide clues to lack of comprehension. Another technique is to encourage interaction through questions directed specifically to a particular student or to a particular site. While students will rarely respond on television to "Any questions?" or "Is everything clear so far?", they cannot avoid responding to their names, however reluctantly. Another way to be sure that everyone is following the lecture is to direct the camera to focus on pre-written highlights of the presentation; the camera can split the screen and show the highlights while the instructor keeps talking. Finally, there is always the option for students to have the class taped by the site coordinator so that they can watch it again at their leisure.

Blackburn also maintains that environment shapes the learner's development. The teacher should capitalize on the fact that adult students have grown up with television and, in general, see it as a pleasureable and non-threatening medium. Whenever possible, on-site students should be invited to perform at the board wearing the lapel microphone, or to present short oral reports. Off-site students seem to feel more comfortable calling in and critiquing the performance of a peer than they do responding to an instructor, and on-site students, after the initial shyness and self-consciousness wears off, usually enjoy being on camera. A goal for an instructor might be to have the camera focus on the class or on individual students for at least one-third of the period: this eliminates the boredom of the immobile "talking head" lecturing without relief. Another activity is to pair an off and on-site student and have the on-site student write from dictation a short piece by the off-site peer; they then edit it together on the board: by forcing both students to concentrate on a particular task, it is possible to get them to see the technology as a medium for communication, rather than an obstacle in its way, and to enhance the student's positive bias toward telecommunications.

Another way to interact with students through television is to ask them to bring job-related writing problems to class. Since technical writing is work-related writing, and since students are actually at work while they are learning, they are usually willing to share fresh and immediate issues with the class. Students might read a letter or memorandum over the air because they are having trouble expressing it effectively. I always encourage them to spot bad examples of technical writing, and have collected many "real" samples of sexist language, obscure jargon, vague and wordy instructions, confusing manuals and illogical proposals. In thus relating learning and working, the teacher is operating on Blackburn's premise that for adults long-range goals have an influence on short-term activities.

No matter how competent an adult is at work, however, the thought of learning in a classroom can often generate anxiety. An important skill in teaching adults is being able to minimize their anxiety; this is true in any classroom, but is particularly so when technology is involved. Even the telephone can become unnerving if that is the only method through which student and teacher can communicate. In our technical writing classes, we try to minimize student anxiety in three ways: we begin the course with an orientation to all aspects of the Maryland ITV system; we employ the techniques that Nancy Schlossberg callls "mattering"; and we give a great deal of aural, visual and written feedback to students.

The orientation is scheduled for the second or third class of the semester; this gives students a chance to observe the setting, buy the books and materials and formulate possible questions. It begins with a five minute film produced by the ITV studio which addresses problems in concentration, communication and comprehension which can occur if Type I and Type II interferences are not prevented. We have found that this film is as helpful to the on-site students as to the off-site students; the former are then better able to understand some of the difficulties their classmates have, and are more inclined to relate to them over the air.

After the film, the class discusses some of the qualities that make a successful ITV student. We remind the class that this delivery system is not appropriate for everyone, and that while most of them will appreciate the ease and convenience of learning at the work place, others will be much more comfortable on campus in a conventional setting. Students are urged to take control of their own learning, and not to assume that television learning is as passive as television watching. We explain the mechanics of the courier system, and the complications that can ensue if a paper is even one day off schedule. We then ask on-site students to come up in front of the camera and introduce themselves over the air, and we end with an explanation of the importance of telephone conferencing.

Students need to be trained to use the telephone effectively and efficiently for conferences. Telephone hours shold be listed in the syllabus, and students should be assured that those hours "belong" to their class. We suggest that they send in a rough draft if they want to discuss it, and we confer with the paper in front of both of us. We urge them to call if there was a point made in class which they did not understand, or even if they merely want to touch base and check that their latest paper made it through the courier system. We have found that in the beginning of the semester, some students will call just to verify that what they heard on the air was really said.

Telephone conferencing is an important aspect of what Schlossberg calls "mattering". Schlossberg maintains that mattering is essential to retaining adult students. She defines it as "the degree to which (adult learners) feel they are appreciated; the degree to which they feel they are missed when they are not in class; the degree to which they feel that their success is a reflection on the professor."(13) Often, off-site students feel that because they are not visible, they are invisible. When we first started teaching on television, that was, regretably, the case: we had no idea who was out there, and we did not interact enough to establish relationships with off-site students; and consequently, off-site morale was low. We were originally hesitant to "waste" time taking roll over the air, but we now realize that the opportunity to chat briefly as we record students' presence is important in terms of the students knowing that they do matter and that we appreciate their effort to be in class.

In addition to giving students feedback in writing, over the air, and on the telephone, we encourage them to give us feedback as well. Many of our techniques have evolved from comments on student evaluations. Specific changes we have made in response to student suggestions include more frequent and shorter assignments; more specific supplementary models; longer telephone hours, and faster turn-around time on papers. We have found that requesting an evaluation memo from students at the semester midpoint provides valuable insight and alllows us to modify and improve the class before it is over. By encouraging a sense of mutual exchange, we hope to provide the kind of learning atmosphere that Blackburn feels essential to adult education. Working adults can benefit greatly from each other in both class-related and job-related issues, and should be encouraged to share information and resources on their projects. Currently, an on-site and off-site student both working on a proposal that their workplaces provide childcare for employees, have shared information over the air and over the telephone.

Technical writing thus, should be seen as a process, not a product. Although we teach very specific techniques for writing manuals, proposals, business correspondence and all types of reports, we hope to communicate to our students that the important aspect of the course is the learning through which one arrives at the final assignment. We are continuously experimenting with the medium of television in order to deliver our course to adults in what we see as the most logical and appropriate system for meeting the needs of working adults: telecommunications.

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PREPARING AND ASSESSING PORTFOLIOS IN EAST CENTRAL COLLEGES: THE PROFESSOR'S PERSPECTIVE

Dr. Sharon Bannister

Findlay College is a private, church-related, liberal arts college of about 1400 students located in northwest Ohio. Findlay has about 35,000 residents and is the home of two major corporations, as well as branches of several other companies. Findlay is within two hours' drive of Columbus, Lima, Toledo, west Cleveland, Fort Wayne, Indiana, and Detroit, Michigan, in addition to several smaller clities. With an advantageous geographical position and business climate, Findlay College decided in 1979 to inaugurate an academic program called Weekend College (WEC).

Weekend College is focused on non-traditional students who work full-time and live within 100 miles of Findlay. Only a few of the college's more than 50 majors, mostly business, are offered in WEC. Many of our WEC students receive financial aid from their employers; 100 companies, now or in the past, have helped employees. WEC has been very successful since its inception; about 250 students enroll for each of the three 12-week terms and aoubt 100 students enroll for the summer. Using a term system (the college's regular programs operate on semesters), operating all year, and holding classes every other weekend enables students who attend full-time to complete degrees in a shorter time than if they attended only evening classes.

Soon after WEC began, we realized that our clientele fit very well with the developing concepts that many non-traditional students have prior experiential learning which matches college-level work, and that it might not be necessary for students to complete all courses in the traditional manner. After reviewing literature, consulting with our neighbor Heidelberg College which already assessed experiential learning, and assigning committees the task of studying the philosophy and mechanics of instituting a program, Findlay College went into the business of granting credit for prior experiential learning in 1979.

Our review, consultation, and study convinced us that of the various alternatives for assessing credit and organizing the process, we would be comfortable with the following principles: (1) FC would use an outside agency for the bulk of the assessment process because this agency, the East Central College Consortium,

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(a) is composed of several small liberal-arts institutions similar to Findlay, (b) was experienced in assessing experiential learning and we were not, (c) would act as a legitimizing agency for our faculty and any accrediting agency, and (d) would provide an on-going structure which we would not have to duplicate on our campus; (2) FC faculty would act as the final arbiter in granting credit; (3) the Community Education office would control the program; (4) we would grant credit on a course-by-course basis, that is, students would apply for courses as listed in the catalogue; (5) we would offer a regular course in the WEC to teach students how to prepare a portfolio; (6) once the course was completed, students would have a year to complete the portfolio. During the year, the instructor of the course would act as a mentor to students involved in the process.

When these principles were established, it became my task to create a course which took students through the steps of preparing the portfolio. The course is lodged in the English department under the rubric of "Experiences in English: Portfolio Preparation" and students now receive two semester hours of credit and a S or U grade. The class, which meets three times for about three hours each time, operates much like a workshop.

I provide an "Introduction" to the costs and mechanical process of submitting a portfolio. This is followed by a section on "What is the Portfolio?" I distribute samples of actual portfolios which have been granted credit. These indicate to students that the format includes a resume; an autobiographical statement; a summary of credit requests course by course; an outline of learning outcomes for each course; an explanation in narrative form of learning outcomes (this is a course description of what does the student knows and how has he/she come to know it thorugh experience); a statement of educational/career goals; and documentation.

I spend much time on each of these sections, not only explaining the mechanics of what is in each section, but also stressing the principles that are essentials in preparing a portfolio. These include: (1) this is a formal written communication, so good writing is essential; (2) college is a unique institution, and students should be familiar with all of its rules and bureaucracy. Regarding this, I provide an overview of the college's academic structure and who students need to contact; (3) students are applying for college credit and courses stress theoretical or conceptual learning, so students must prove they know theories and concepts underlying courses. Merely counting years of experience will not earn credit; (4) documentation is the way in which students verify what they did when they said they did it. Thus, it is important to provide appropriate and high-quality documentation, such as letters from superiors, transcripts, certificates, licenses, awards, reading lists, etc.

Once I complete this section, I explain where students might run into difficulties or which courses might not be granted credit. While doing this, I am reviewing the academic structure of the college and indicating who are appropriate persons to contact.

This material covers two of the three class periods. In the last period, I hold individual interviews with students. They submit rough drafts of a resume, the autobiography, and one course description. We assess where students are in their programs, what courses they might apply for, and explore any other questions. I review the written material and mail it to the students. If they complete portfolios, students use this as the beginning segments of their work.

We have added modifications to the process based on early experience: (1) students borrow syllabi and texts for courses so they are familiar with content and objectives; (2) students contact each instructor who teaches courses prior to submission. Instructors then know that students are "in the pipeline" and are familiar with students before the portfolio appears; (3) I read all portfolios before they are submitted to the ECC; (4) the ECC contacts only the Dean of Community Education who then informs students of credit granted. This is done because occasionally there is a difference in what the ECC recommends and what the FC faculty approve; (5) we have found that the use of internship and community-urban experience (a type of off-campus study) is useful for our students; (6) we have tried to shorten the length of time between submission and final approval of portfolios.

Once the course is over, students then operate independently. They do research, write, contact instructors, and consult with me. I see drafts of portfolios at least two weeks prior to the submission date, which gives students a chance to revise. The extent to which I consult varies. Sometimes, I see portfolios once, all is fine, and I simply sign off on them when they are submitted. Sometimes, I see material many times, hold conferences, and have several telephone conversations with a single student.

After students submit portfolios, my part is over. Portfolios go to the ECC, where its own process begins. In about six weeks, the ECC gives its recommendations, portfolios are then returned to our campus, and they are circulated among relevant faculty for final approval. The final step is to place the credit, course by course, on the students' transcripts.

As you can see, this process is complex and involves the cooperation of myself, highly motivated students, the Community Education office, the ECC, and relevant FC faculty. However, the process is generally quiet and smooth. Highly motivated students and cooperation are the keys to a steady flow of portfolios since 1980.

About 130 students have taken the course. Of these, 40 students have submitted portfolios, 39 were approved, and 36 students have graduated. On the average, students receive about 23 hours of credit. The most granted has been 55 hours, and the least has been 9 hours. We advise students not to go through the process unless they are going to apply for 12-15 hours, because the process would not be worth the effort for fewer hours.

Overall, the portfolio process is beneficial to the college and to the students. This process provides a program which fits one of our most important clientele's needs and acts as an incentive towards graduation. As such, it fits the college's purposes and needs and has been a successful effort on all counts.

PREPARING AND ASSESSING PORTFOLIOS IN EAST CENTRAL COLLEGES: THE ADMINISTRATOR'S PERSPECTIVE

Robert L. Joyce

Heidelberg College -- a school of about 1100 students in Tiffin, Ohio -- credentials experiential learning through a portfolio process developed and administered by the East Central Colleges (ECC), a consortium of eight four-year, independent, liberal arts colleges in Ohio, Pennsylvania, and West Virginia. It is this process that I would like to review briefly, focusing on the process as seen by the administrator of Heidelberg's program for the non-traditional (the adult) student.

Heidelberg College

At Heidelberg adult students may be enrolled in regular day or evening classes scheduled primarily for the convenience of the traditional student and in Weekend College classes offered almost exclusively for the convenience of the adult student. During the 1988 Spring semester, there are 157 adults enrolled at Heidelberg, 92 of whom are taking Weekend classes. About 15% of the Heidelberg students this term are adult students.

The ECC Process

The ECC process for credentialing experiential learning works in the following way. The student submits nine copies of his or her portfolio to the Executive Director of the ECC, the portfolio consisting of a resume, a very brief autobiography, a course-by-course list of credit requests, a list of learning outcomes to accompany each course, and discussion and materials to document the legitimacy of the credit requests.

The Executive Director (1) distributes the portfolios to members of the Assessment Board (one representative from each of the eight Consortium colleges) and (2) assigns two primary readers to the portfolio, neither primary reader being from the school from which the portfolio is submitted.

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The two primary readers fine-tooth the portfolio, conferring as the need arises with other faculty on their own campus or on other ECC campuses. These two readers then confer and bring recommendations to the whole Assessment Board, which then deliberates and recommends to the home campus the specific requests that should be awarded credit. The fee for the assessment is currently $495 plus an additional $50 for each course to be assessed in excess of five courses.

Benefits of the Process for the Program

From my point-of-view, the process has at least three benefits to the Lifelong Learning program: it aids in recruitment, in the screening of applicants for admission, and in academic advising.

Recruitment. The process generates inquiries, expedites the student's progress toward the degree, and projects an image of Heidelberg as an institution sensitive to the adult student. Most of our announcements about the Lifelong Learning program indicate that students may receive credit for learning done outside the formal classroom. Some of our inquiries for information are prompted primarily by this particular feature of the program. Many students who subsequently decide that they are not candidates for assessment credit still decide to enroll in coursework with us.

Of course by expediting the progress toward the degree for those who do qualify for experiential credit, the process makes our program more attractive than competing programs that do not recognize such credit. The student saves both time and money.

Most importantly, Heidelberg's willingness to recognize experiential learning shows us as an institution with a sincere and serious commitment to the adult student and suggests that if we are sensitive in this area to the needs of adults, we are likely sensitive in other areas as well.

Screening for Admission. Although students don't actually begin the assessment process until after they've been admitted to Heidelberg, initial conversations about the process give us a chance to learn not only about the student's past learning, but also about the student's current motivation and seriousness. In discussing their expectations about the amount of credit they expect to receive, some students may reveal that they are seeking an easy ride to a degree and would bring no serious commitment to a rigorous program. Some students may reveal such poor writing skills that they would likely be poor academic risks. These students usually self-select themselves out, not proceeding to apply for admission. Those who do proceed do so with a better awareness of the level of performance required in the program.

Academic Advising. For students who are admitted and who pursue assessment credit, the process aids us in academic advising. A student who prepares a portfolio provides us with an excellent assessment of his or her current level of skills, especially in communications; and the process focuses the attention of the student on long-range educational planning and career goals. The process often leads the students to self-discovery; and on almost all occasions builds the student's confidence and gives him or her a sense of accomplishment and self-worth.

Strengths of the ECC Process

Objectivity. Because the amount of credit awarded is outside the control of Heidelberg alone, we cannot be accused of negotiating with the student in order to buy his or her enrollment. An "outside agency" determines the credit. Assessment by this "neutral" body lends greater credibility to the process than it would have if done solely on one campus. This increased credibility has perhaps forestalled some Heidelberg faculty from questioning whether Lifelong Learning has been overly lenient in awarding assessment credit simply to improve enrollment through our Division.

Access to Broad Expertise. With representatives from eight campuses, the ECC Assessment Board has access to far greater expertise than any one campus alone can offer. Students who wish to credential learning in areas where Heidelberg may lack faculty well qualified to judge the specific requests may still receive fair evaluation from qualified faculty on other ECC campuses. And Heidelberg may offer expertise to students from campuses that may lack that specific expertise on their home campus.

Access to Broad Curriculum. Similarly, by being able to request credit for courses offered by any of the ECC schools rather than being restricted to courses offered by only one school, the student has a broader curriculum from which to choose and thereby greater opportunity for matching his experiential learning with an appropriate college course.

This match-up works to the advantage of the student in another way: because assessment credit is transcripted course by course, the student's transcript reflects with greater precision the student's actual learning than the transcript would do if the student had to work with only one college catalog.

Problems with the Process

The process does, however, have problems that the ECC has not yet solved.

Slowness. Because the ECC Assessment Board evaluates portfolios only twice a year, students may have to wait a minimum of six months before they can learn how much assessment credit they will receive. The time is usually much longer than this, for the actual preparation of the portfolio usually takes several months. Such a long delay discourages some students from following through on the process. The pay-off seems remote. The time involved is especially likely to discourage the student who wants to know how much credit he or she can receive before making a major commitment to the program.

Difficulty of Keeping Students on Track. Because the preparation of the portfolio is a rigorous and time-consuming process, the student is often distracted by other demands on his or her time, especially the student who is pursuing coursework at the same time. Individual advising does not seem to provide the kind of structure and incentive that some students need--even some very good students.

This need to provide a more structured approach to the portfolio is one of the reasons we began offering our course in portfolio preparation. But students complete this course with only a portion of their portfolio done.

Difficulty of Getting Detailed Information about Courses. In detailing the learning outcomes of specific courses, students frequently find catalog descriptions too vague to be useful. The students are therefore encouraged to request appropriate course syllabi from faculty who teach the courses. Some faculty across the ECC are unresponsive to student requests for such syllabi--perhaps because the faculty member does not wish to encourage the awarding of assessment credit or perhaps because the portfolio process has a low profile among many faculty who therefore seem unaware of the importance of the syllabi to the student's purpose.

Heavy Demands on Assessors. Members of the ECC Assessment Board generally carry full-time teaching loads on their respective campuses in addition to their duties as assessors. As assessors they must spend many hours of consultation and reflection as they review portfolios, and they must, of course, attend Saturday sessions when the Assessment Board meets. Since a primary assessor receives only $60 per portfolio, the fee seems ridiculously low for the work involved. Some assessors have expressed appreciation for the opportunity the process provides for them to work closely with colleagues on other campuses, yet the ECC needs to explore ways of rewarding more significantly such commitment.

Some Statistics

But even with these problems, the ECC process seems an outstanding one and provides a significant opportunity for the adult student. Over the past thirteen years, 108 students have received credit through the ECC's process, including 25 from Heidelberg and 40 from Findlay. Of these 108 students almost 75% have subsequently graduated from ECC colleges, and more than 7% are known to have gone on to graduate and professional schools.

For the 25 portfolios from Heidelberg, the following statistics apply: the lowest amount of credit awarded is 4.3 semester hours; the highest amount of credit awarded is 38 semester hours; and the average number of credits awarded for Heidelberg portfolios is 22.9 semester hours-- that is, the equivalent of about one and one-half semesters of credit.

As administrator of a program for adults, many of whom are returning to college after considerable learning done outside the formal classroom, I find the ECC Assessment Process a real asset to our Lifelong Learning Program.

IMPROVING ASSESSMENT RATES THROUGH FACULTY INVOLVEMENT

Susan Kemper, Ed.D. and Linda Olasov, Ph.D.

Introduction

Northern Kentucky University, the newest of Kentucky's eight universities, was founded in 1968. It is located in the largest metropolitan area of any state university in Kentucky, three miles south of Cincinnati. NKU's missions statement includes offering programs that promise to improve the university's service to its constituencies. (1) One of these constituencies is adult students. Currently, close to 45% of the university's students are over 25 years old. There has been a doubling of the proportion of 30-49 year olds since 1975. Most of these students are working inside and/or outside the home and, therefore, must attend the university on a part-time basis. (2)

We are finding more adults in our university classrooms. (3) Some are mature, knowledgeable students who bring with them theory and experience enough to test out of specific classes. There knowledge may meet or exceed the learning outcomes established for students enrolled in the class. We need to recognize that it is possible to have acquired valid information in settings other than the university classroom.

The Council for Adult and Experiential Learning reports that many (up to 1/3) colleges offer national tests like the College Level Examination Program (CLEP) and institutional options like departmental exams and portfolio which allow students to test out of classes and receive credit for their life-long learning experiences. These colleges also allow students to apply the credit they earn toward a college degree. One of these options, the writing of a portfolio (utilized by NKU since 1985), is described below.

Portfolio

Portfolio is simply one method among many of assessing whether students have acquired the "learning outcomes" associated with specific college courses. (Portfolio contents will be described later.) If their documentation and written statements prove to the faculty assessor's satisfaction that students already know what is taught in a specific course, they are granted credit.

Three-quarters of these "new" students who attend an NKU information session for an explanation of the concept report preferring this test method rather than standardized tests because:

1. it allows them to express their learning in a manner that is consistent with the way in which they learned it. If they learned by reading and processing abstract information, then a standardized test would be an appropriate evaluation technique. Since these students have learned through experience and by doing, a portfolio is a more appropriate technique for demonstrating learning.

2. it gives them control, since they can express their learning in their own words.

3. it allows students to express fully the breadth and depth of their understanding and application of the information rather than just the facts. It provides an opportunity for students to realize and describe insights and applications of acquired learning in concrete ways based on real world experiences.

Students who think that portfolio credit is appropriate to their needs and who are willing to undergo the rigorous demands of assembling appropriate material for a portfolio can then register to take a portfolio class. Students are taught to assemble a portfolio through some method determined by the individual institution: either a credit or non-credit course and sometimes assisted by a "how to" workbook.

The typical portfolio includes:

1. a typical resume.

2. a work/life autobiography list of significant work/life experience, for example, what information was learned and how knowledge was acquired.

3. a learning statement that describes the process through which course-specific learning outcomes were learned. For example, a student requesting credit for a Supervisory Development course learned theoretical constructs on the job, in seminars, and in workshops. She applied these theories daily when performing her supervisory responsibilities. This statement provides the information necessary to allow the faculty evaluator to assess the equivalency of learning as experienced by the portfolio student vis-a-vis the learning outcomes of the course for which credit is sought.

4. Documentation may include, but is not limited to, letters of recommendation, certificates, diplomas, work evaluations, seminar/workshop agendas, copies of presentations, and computer programs. The supervisory development portfolio student included a superior performance evaluation and an "Outstanding Manager" award as part of her documentation.

Early in the portfolio process, students are encouraged to identify a particular course in the Undergraduate Catalog for which they believe themselves to be strong portfolio candidates. A copy of the syllabus for this course is then provided to them. Next, the program representative contacts an appropriate faculty assessor and a consultation is arranged. The faculty assessor ordinarily meets or speaks with the student to determine if the candidate has the potential for success. The assessor may suggest alternative courses for which the student's learning might be better suited. Occasionally, an alternative test method may be used to document prior learning. The assessor may agree to mentor the student during the writing process. Faculty assessors are awarded a nominal honorarium for performing this university service regardless of the portfolio's acceptability.

As with traditional courses, students receive credit only if their performance is found to be consistent with the faculty assessor's communicated expectations; this insures the academic integrity of a portfolio program. After securing the agreement of a faculty member to serve as assessor/mentor, the portfolio student then develops a complete portfolio and submits it. At this time, it is either accepted for credit, rejected, or returned to the student for modification or revisions.

Improved Model

The above described portfolio model has evolved and improved. It is improved from the original model implemented in 1985. Since the director is also responsible for several other major credit continuing education programs, she does not have the time to carry out all the tasks related to portfolio operations. The decision to share responsibility for the portfolio program with department chairs and their departmental members, a program liaison, and the portfolio course instructor was partially due to practical considerations. The result, however, is this improved model that increases interaction with faculty assessors.

The director now deliberately confines her responsibilities to the administration of the program specifically related to policy and procedural aspects. She does not engage in program delivery. Initially, she established and implemented the program with input from a campus advisory committee and members of the Council for Adult and Experiential Learning (CAEL) consortium. Marketing, student information sessions, all student registrations, credit requests and payments are handled through the director's office. She also serves as the ombudsperson, since she negotiates and mediates any other issues or concerns.

Departmental chairs are responsible for acceptance of the portfolio concept within their departments. They determine which courses are viable portfolio options; select appropriate faculty to serve as assessors/mentors; and furnish current syllabi for courses requested by students.

Faculty have the right to either refuse or agree to assess portfolios. Once they agree, they may suggest how to write portions of the portfolio and suggest what evidence students should use as documentation. They may also agree to review or critique portfolio drafts.

The course instructor teaches the students how to construct the portfolio document. Skills taught in the class include: critical thinking, technical writing, analysis of work/life experience, and ways to properly document learning. She evaluates her effectiveness after each class by reviewing end-of-semester course evaluations. Needed curriculum changes are continually made.

The final member of the team is the program liaison. She is the translator, interpreter, and advocate for both students and assessors. She explains the portfolio process to new faculty. She is also an advisory committee member. This division of labor draws parameters around the responsibilities of each team member.

Shared Program Responsibility

Division of labor allows those involved in portfolio to share responsibility. It has several beneficial results.

1. MORE OPTIONS FOR MANIPULATING FINANCIAL RESOURCES. Rather than make one major investment in hiring a program assistant, it was discovered that the university preferred to fund several part-time positions. Directors of portfolio programs in other institutions should determine how best to manipulate their own unique financial resources. At NKU, it "appeared" less costly to finance the portfolio program through shared program responsibility, since funds were drawn from separate accounts rather than one line item.

2. HIGHER PRODUCTIVITY. Each member of the portfolio team, described above, has a specific responsibility on which she stays focused. Each becomes an expert at streamlining their program task. Also, if roles are maintained, the university community comes to know whom to contact about specific program issues. Also, individual team members spend more hours at their part-time task than one full-time assistant could manage.

3. MORE CREDIBILITY WITH FACULTY/ASSESSORS. Each program team member has credentials appropriate for their area of responsibility. For example, the program director has a doctorate in adult/higher education. Consequently, she is perceived as qualified to administer the program. The course instructor was deliberately selected from NKU's faculty rather than from any outside agency. This was done to reassure the university community that high academic standards would be maintained. The program liaison is the most visible and, therefore, could be considered the most critical link in sustaining the success of the program. She constantly "represents" the program to faculty. She has been heavily involved in faculty governance, knows almost all of the faculty either professionally or socially, and has academic credibility as a tenured professor in her department. Each of the people involved in program delivery--the director, the instructor, the liaison--is a credible member of her own collegial network. Consequently, more members of the university community understand, accept, and respect the portfolio program.

Increased Contact with Faculty Assessors

Increased acceptance of student portfolios comes with program credibility. This increased acceptance is even more attributable to improved interaction with faculty assessors.

1. NEW, IMPROVED MODEL. The original model had only administrator-to-department contact. When the program began, the director visited each departmental meeting and described the concept, the process, and anticipated results. A faculty member might never hear about the program unless she or he received a portfolio for assessment some months later. Now there are many points of contact before the assessment is requested.

2. STUDENT/FACULTY CONTACT. Originally, there was no student-to-faculty assessor contact. The student compiled and wrote the entire portfolio with no imput from the person who would ultimately determine its acceptability. The portfolio course instructor guides the student on format issues, but she is not a content expert. No faculty mentoring took place. This presented problems for several reasons. First, the student may write a portfolio based on an outdated syllabus. Secondly, the student may write to the syllabus of one faculty member and have their portfolio evaluated by a different faculty member. Each instructor has unique expectations about what a student will learn in their class. Finally, syllabi are frequently incomplete since instructors often verbalize

additional learning requirements.

3. REQUIRED PRE-WRITING MEETING. The new model now requires a meeting between student, liaison, and faculty assessor to accomplish the goal of increased portfolio acceptance due to improved communication and interaction. As previously described, a consultation is arranged so that student, assessor, and liaison have face-to-face communication with the following results: both the student and assessor get a sense of the other's personal values and philosophy; the assessor has an opportunity to hear the student describe and explain their life experiences and previous learning opportunities; conversley, the student is able to hear the assessor describe what and how they teach. This allows the student to determine if there is congruency between their experiential learning and the learning of a traditional classroom student. At this point, a faculty assessor frequently volunteers to mentor the student. They encourage further communication by offering to critique rough drafts, and to phone for guidance if needed. They may lend students textbooks, and give them reference lists. Some also suggest what they would consider to document appropriately the student's learning statement. Meeting face-to-face not only promotes understanding between the parties, but enhances the prospect for the production of a successful portfolio.

4. LIAISON AS A BROKER. The faculty liaison is a broker who educates, translates, and advocates for both the portfolio student and faculty assessor. Educating new faculty to program concepts and reviewing concepts with first-time assessors help create evaluators who are confident and competent. Students learn to ask questions focused on information critical to their success. The liaison translates academic jargon into language the portfolio student can understand. She also helps students phrase questions in a way that faculty will understand.

   Advocating is the most significant task of the liaison. It most insures success. Advocacy means that the concerns of both the student and assessor are represented fairly. The students generally lack experience dealing with university professors and are, therefore, fearful. Coaching, advising, and preparing students help to allay their fears and to defray defensive behavior that creates barriers to effective communication. Faculty are less likely to "overreact" to any student behavior in the presence of the faculty liaison, who is their colleague. It should be noted that the liaison supports the faculty member's right to discourage or deny students from writing portfolios for which they are clearly not qualified. Fewer unqualified candidates mean fewer rejected portfolios. Higher success rates insure the continued credibility and integrity of the program and the liaison.

Documentation

Statistics support the thesis that increased interaction with faculty assessors has improved the acceptance rate of student portfolios. (4) Under the old model which included the first two classes in 1985, 15 individuals submitted 43 portfolios, almost three per student. Twenty-seven were accepted and 16 were rejected for a 63% acceptance rate. By contrast, during the last two classes (improved model) held in 1987, 26 students submitted 45 portfolios, 1.7 per student, and only two were rejected for a 96% acceptance rate. Students were submitting fewer portfolios, but with greater success.

As noted above, a screening of candidates and their learning occurs during the pre-writing conference. Students are able to determine if they know enough to successfully complete a specific portfolio. They do not attempt portfolios where the probability of success is minimal. This self-selection is a direct result of student/faculty interaction.

Shared program responsibility and improved contact with faculty assessors has increased the potential for student success. Faculty and students become acquainted on a personal basis and thus better understand each other's expectations. The second benefit of the meeting is that students and assessors are better able to determine which portfolios should be attempted. This sense of ownership and control by both parties contributes greatly to the success of the portfolio program.

ENDNOTES

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Northern Kentucky University 1987-88 Undergraduate Catalog.

GRANTING ACADEMIC CREDIT FOR LIFE EXPERIENCE

by

Thomas Kowalik

Introduction

Granting academic credit for life experiences continues to be an area of controversy in the field of adult education. Practitioners and theorists alike, disagree concerning the worth of this special dimension of non-traditional adult education. The objective of this paper is to present an overview of the controversy surrounding granting academic credit for non-traditional educational experiences and the State University of New York at Binghamton's (School of Education and Human Development) model for granting credit for a variety of non-traditional experiences.

What the "Experts" Say: Opposing Views

A review of the literature concerning the granting of academic credit for non-traditional learning, i.e. skills or knowledge learned in an environment outside the traditional classroom setting, shows a variety of issues arise when exploring this aspect of non-traditional education. The experts do not agree on the worth or appropriateness of awarding academic credit for life experience. As the number of non-traditional students returning to college campuses continues to increase, this controversy must be resolved by each individual school.

Proponents and opponents of granting credit for life experience frequently mentioned the same issues both as advantages and disadvantages of this concept. These issues include: the fact that educators must decide which is more important - the knowledge attained by the student or the process or source by which the knowledge was obtained; difficulty assessing life experiences; and financial issues.

Those authors in favor of granting credit for non-traditional learning believe that the skills and knowledge acquired by the student are more important than the source of the knowledge (Meyer, 1985). These authors argue that learning, not teaching is important (Vanderwerf, 1980). As more older, non-traditional students attend college, they bring skills, knowledge, and experiences not typically associated with traditionally aged 18-21 year old students.

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Proponents of granting credit believe there exist financial benefits of awarding college credit for life experience. For example, non-traditional students save money and time by not having to attend unnecessary courses. Colleges may receive increased revenues because by offering credit for life experience they may attract students who might not otherwise attend (Swift, 1985). Society as a whole, in the form of taxpayers, may see a financial savings when it doesn't have to pay for duplicated learning of students attending public higher education institutions.

Those authors opposed to granting academic credit for life experiences, point out the difficulty of assessing life experiences. Typically, testing and/or review of a student portfolio are methods used to determine the worth of previous experience and the knowledge level attained by the student. The trouble in utilizing these methods is that test design becomes a crucial factor as well as test security (Hills, 1977). Some opponents to granting credit also mention that there are some courses and fields of study that may not lend themselves to this type of assessment. Portfolios also possess an inherent weakness in that their review and evaluation is subjective and controversial (Southerland & Fairchild, 1984).

Another consideration when deciding whether or not to grant credit for life experience is that traditional classroom interaction provides a superior method of learning and better quality learning. It is also worth considering that certain colleges and faculty may be adversely affected financially. Students may pay lower tuition rates for life experience credit or may attend college for a shorter period of time, thereby reducing the amount of income generated from enrolled students. Faculty teaching introductory level courses may not have as large classes as upper level faculty and therefore risk job security.

Many colleges have made a decision in response to the question of whether of not to grant academic credit for life experience. However, the controversy concerning this aspect of non-traditional education has not been resolved.

The School of Education and Human Development Model - Career and Interdisciplinary Studies Division (CIS)

At the State University of New York at Binghamton (SUNY-Binghamton), academic credit is granted for previous noncollege or university education and training. During the latter 1970's the School of Education and Human Development experimented with a variety of approaches to granting credit for competencies gained through life experience. Many of the inherent difficulties in this type of endeavor have already been identified. The cost of faculty time in advising and assessment ultimately lead to a decision to assign credit only for formal experiences in noncollegiate settings as opposed to assessing competencies. Thus, credit for "life experience" is not granted by the institution. The typical procedure for granting credit for previous educational experiences is to have the student prepare a portfolio. The student works with a staff advisor to put this portfolio together in the fashion desired by the C.I.S. Academic Standards Committee. The portfolio includes: certificates of completion or internal transcripts (businesses); copy of the course syllabus; course length; instructors credentials; copies of and results from any tests/ evaluations; a list of texts; and a presentation of how the previous course fits with the student's program within the Career and Interdisciplinary Studies division at SUNY-Binghamton. The student presents the completed portfolio to the advisor who then presents it to the Academic Standards Committee for review.

Historically, the Academic Standards Committee committee has not approved workshops and courses for which attendance was the only criteria for receiving a certificate (some sort of evaluation had to be completed during the course). The primary tools used as guides to assess the worth of noncollege training include the *Guide to Evaluation of Education Experience in the Armed Services*, and *A Guide to Educational Programs in Noncollegiate Organizations: Program on Noncollegiate Sponsored Instruction - The University of the State of New York.*

For those students wishing to explore the possibility of gaining academic credit for life experience which can be applied toward their SUNY-Binghamton degree two options exist. Due to the expertise of the staff advisor, it is possible to refer students to either a local community college or Empire State College.

The local community college does grant credit for life experience. Students referred to this community college are often times granted academic credit for experiences that would not typically receive credit at SUNY-Binghamton. Once the students have received academic credit and it is placed on their community college transcript, they can then transfer the credit to SUNY-Binghamton. Transcripts of credit granted by the local community college are accepted for transfer credit into the CIS division undergraduate program.

The second option often used by students wishing to receive academic credit for life experience is contact Empire State College. This college specializes in granting undergraduate degrees to non-traditional students. After obtaining academic credit for their life experience at Empire State College, those students who desire a SUNY-Binghamton degree may then transfer credit. Transcripts of credit granted by Empire State College are also accepted for transfer at SUNY-Binghamton.

Summary

As the debate continues, each institution of higher learning must decide its position concerning the granting of academic credit for life experience to non-traditional students. This paper has provided an overview of the issues of concern when institutions explore the feasibility and legitimacy of this concept. The CIS division within the School of Education and Human Development at SUNY-Binghamton has chosen to reach for the best of all worlds. The issue of granting credit for life experience and the institutional and philosophical problems that arise have been delegated to other institutions. At the same time a great deal of flexibility remains, allowing non-traditional students to ultimately receive credit for life experience toward their SUNY-Binghamton undergraduate degrees. Other educational institutions wishing to better serve non-traditional students by providing academic credit for life experience may want to learn more about the model SUNY-Binghamton has developed.

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ANDRAGOGY AND REFLECTIVE PRACTICE:
ASSESSING LEARNING AND DEVELOPMENT

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The fields of developmental theory and adult learning offer untapped conceptualizations for developing assessment techniques from a theoretical base. If emphasis is placed on the process by which individuals learn to become solid practitioners, then the conceptional framework derived from adult learning theory offers significant value for assessing learning and developmental outcomes.

Educational practice that is anchored in adult learning theory is often termed andragogy. Theorists interested in the adult learning process suggest that certain characteristics of adult learners require alternative instructional strategies and evaluative practices (Freire, 1972; Knowles, 1979, 1980, 1984; Mezirow, 1981; Rogers, 1969). Experiential learning is a central consideration because a major proposition is that adults learn most effectively when the learning process is in response to a problem or a need. Additionally, the process of reflection has significance in adult learning theory (Mezirow, 1981). Reflection requires practice in processing and integrating experience. For example, Schon (1983) contends that practice is "reflection in action", a process which suggests that meaning is constructed by the participant. The explication of that meaning requires reflection, an historical analysis which serves as a subjective assessment technique.

The andragogical model is represented by a system of six principles and corresponding assumptions:

- The need to know, since the adult learner seeks out importance attributed to a learning task before undertaking the task of learning

- A change in self concept, since adults need to be seen as capable of self direction

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- Experience, since mature individuals accumulate an expanding reservoir of experience which becomes an exceedingly rich resource in learning

- Readiness to learn, since adults want to learn in the problem areas with which they are confronted and which they regard as relevant

- Orientation toward learning, since adults' problem-centered orientation makes them less likely to be subject centered

- Motivation, since the norm for adults is to be motivated to continue growing and developing (Knowles, 1984).

The assumptions of andragogy posit the learner as an active constructor of knowledge and experience and a significant participant in the evaluative process. Andragogy places emphasis on the self, on motivation of the individual, on the process of reflection, and on experiential learning. These tenets serve as a foundation for praxis.

In order for a person to effectively participate in the evaluation of his own learning and development, a knowledge of structure and process in essential. There is a need for a conceptual understanding of the relationships between intended outcomes, strategies to reach these outcomes, and a knowledge of how one can be a perceiver of his own learning. A knowledge of structure and process at the onset provides the basis by which the learner can conceptualize the whole and integrate its parts, to see means/ends relationships, and to construct the meaning of experience.

Knowledge of structure and process is vital since this knowledge provides conceptual tools for analyzing experience and explicating meaning derived from the experience. In this view, experience is constructed and reconstructed through concrete interaction with phenomena and facilitative dialogue which involves personal statements about the products and processes of learning. The assumptions underlying this perspective are that the learner is 1)valued as a subject and 2)capable and desirous of describing the quality of his inner experience and his perceptions of the external world grounded in time and space.

If we do not engage the learner in a dialectic which asks him to share his learning and experience, we dismiss the meaning of his interaction with phenomena. We will never get to know about his "subjectivity." For example, teachers usually "give" a rating or an assessment based upon a product such as a paper or a test. A major assumption is that the product is a true reflection of what was taught, how it was represented, and its value relationship to major goals or outcomes. If all of the above validate the assumptions, we get to know something about the learner. If some part or parts are missing, we know less about the learner in legitimate terms. The real question is, however, "What do we really know about this learner in his own terms relative to what we intended for him to learn?" If we care at all about the question, then we need to attend to processes which value subjective assessments and revelations about cognitive and affective learning.

An analogy may be appropriate at this point. Let us say that our goal for all learners is to get to Chicago. Someone must make decisions and judgments about how to get there. There are obviously many options available regarding the means. At any rate, suppose that we achieve our goal of getting to Chicago. We are there.

As educators, we generally see the fact that we are in Chicago and we generally make assumptions and assessments about the fact that we are in Chicago without any knowledge of the circumstances, events, problems, or issues that it took to get there. There is a void between the initiation of the task and the end product. We need the learner to fill the void by explicating the phenomenon of getting to Chicago. Were there problems? Did we need more information? Did we meet anyone? Were good choices made? How do we feel about the experience? What did we learn in our own terms? What does this mean regarding our development?

In andragogy, the construct of self is primary and suggests that the self is a powerful determinant in choice and will in given contexts. The self is not only reactive, but proactive in terms of using the past to create the future. This point strongly suggests the need for conditions and opportunities for engaging in reflective practice. Reflective practice will, in turn, provide the independence and motivation to search for stimuli and seek experience. A significant number of psychologists believe that the single basic motivation is actualization of one's potential.

Self is the most important part of one's phenomenal field. It is reasonable to assume, therefore, that the normal person, free from threatening conditions, can strive for unity. Learning the power of the self increases potential and confidence in controlling the environment in which thinking, acting, and feeling take place.

There is not an absolute form for helping in the process of dealing with self-discovery, but there are measures which can be used to emphasize individual confrontation with phenomena. If the person realizes that his subjectivity is valued, and that meaning given to phenomena can be given by him, then meaning becomes a dynamic which will be created, changed, and emergent. The art form requires practice in reflectivity and the implementation of new and different patterns of behavior; it requires emphasis on constructive assessment.

Understanding the self as an instrument of learning provides for a significant impact on competence because the self-instrument can and will construct and reconstruct experience , develop new meanings, and direct new experiences.

Given opportunity, the person will assess and reveal the extent and variety of ways by which he can be viewed. Experiences of the dimensions of experience will provide insight into the phenomena under consideration. Because insights are self-reflective, the person becomes an entity within the structure in which he functions. This context provides a conceptual framework in which there is an urgent sense of sharing and communication.

Learning is ultimately defined by the person's way of perceiving his work in relationship to some pre-determined or self-determined end. Perception can be expressed as knowledge, application, and attitude. Learning, in fact, may be the relationship between these contents and the behavioral history of the person.

Behavioral expression as a form of assessment can show the congruence between the person's behavior and the participative experience in tasks or situations, goals or ends may be predetermined, but awareness of the how of a task can only be perceived in retrospect.

Disciplines have no meaning or value unless people invest them with meaning by situating them in the context of what they personally mean. But, perception cannot be explained without behavioral counterparts which are given an intentional interpretation rather than a mechanical one.

A reflection in action orientation will attempt to raise the consciousness of meaning and intentionality with respect to learning. If we can assume that learning to be competent involves new perceptions and patterns of behavior, then the significance of the learning is found in what the learner reveals about perceptions, behaviors, and applications. He should be able to speak of himself in a precise awareness of his ownership in order to strengthen his reflectivity, self-awareness, knowledge and understanding of his experience, and the rules by which he acted. The dialectic about what happens between the onset of experience and the termination of experience provides concrete manifestations of phenomena. In this sense, the meaning of experience is constructed and reconstructed.

In order to implement the beliefs and values suggested by concepts from andragogy, a competency based learning assessment technique for adults in a particular paralegal studies course has been developed. Structurally, students are apprised of the philosophical and psychological principles, major goals, and objectives. Role-related competencies serve as a behavioral base for explicating concrete manifestations of abstract phenomena.

In terms of process, the explication of phenomena requires reflection on the relationship between the phenomena and what has the potential to explain the phenomena. This process is constructive in that the learner seeks to define what the phenomena mean in subjective terms. Therefore, this approach helps to answer the question of meaning in analogous rather than imitative terms.

When students are admitted to the paralegal program, they are enrolled in an orientation. An important feature of the orientation is the presentation of the concepts and constructs of the program. Illustration 1 offers a depiction of the fundamental constructs of a course in the program. The holistic feature of the curriculum of this course is displayed in this illustration. The major competencies of the curriculum are the "objectives". Competencies are measured by activities suggested in the "evaluation" component. Opportunities for competency development are found in the "experiences" component of the curriculum. When these notions are fully implemented in all courses, students should come to understand that courses are vehicles for the development and explication of competence and that the program, driven by competencies, is greater than the sum of its parts (courses).

The explication of the phenomena requires reflective and historical exercises which generate the meaning of the relationship between the abstract and the concrete. This process is referred to as the construction of competence, a subjective, yet verifiable, validation of the relationship between a stated competency or set of competencies and the nature of the task which enabled the student to make a validation claim cognitively and affectively. The theoretical underpinnings of this line of thought are treated in another paper titled "Phenomenological Pedagogy and the Construction of Competence" (Ribich, 1979). Very simply, competence is viewed as a phenomenon, an abstraction which needs to be defined in terms relative to its dependent contexts and promoted as tentative and temporal. As a student returns to the task itself and its dependent contexts in order to understand the psychological phenomena in a meaningful way, he engages in a process of descriptively identifying what the phenomenon looks like. The sense of the phenomena of a competency is in its description. The behavior-qualitative approach helps to answer the question of meaning. In this sense, the mode for constructing the meaning of competence fosters the analogous rather than the imitative.

Illustration 2, Validation Questionnaire, asks the student to reflect upon his experiences, to develop an awareness of his participation, to construct personal meaning, to relate means and ends, and to cumulatively construct his competence within the parameters of the program. Products and processes are integrated in this process. The student completes the Validation Questionnaire for this course. These data are used for further reflection, analysis, and development by both the student and instructor.

Based upon our philosophical and psychological assumptions for the program, we believe that the implementation of principles of andragogy and reflective practice will provide for the important participation of the learner in assessing and validating the meaning of his educational encounter. Additionally, the active involvement of the learner in the evaluative process should produce the following positive educational outcomes:

*Involves the student in his curriculum and educational existence

*Extends the thinking process

*Provides coherent design for growth and gathering evidence

*Involves the student in the evaluation process

*Develops a conceptual tool

*Emphasizes the individual and diversity of means and ends

*Provides validation by consequence and inputs

*Raises consciousness of self

*Organizes a qualitiative process for developmental evaluation

*Places responsibility on the individual

*Clarifies ideas and involvement

*Sensitizes students to unanticipated events

*Humanizes the schooling process

*Emphasizes language as a major means of communication

*Provides a strategy for reconstructing experience

*Helps students actualize potential and increase confidence

*Allows the student a measure of control over his own development.

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ILLUSTRATION 1

COMPETENCIES FOR REAL ESTATE TRANSACTIONS

Objective	Experience	Evaluation
1. The students will have an increased familiarity with the vocabulary which they will encounter in the study of real estate.	1. Lecture-discussion; use terminology in practical application.	1. Students will be able to define various terms on an examination and will be able to apply these words in various practical types of real estate transactions.
2. The students will become familiar with the historical origins of the law governing real estate, and the student will understand how real estate in the United States has developed from foreign control and finally to private ownership, as well as the basic incidents of private ownership.	2. Assigned reading, lecture-discussion and review of terminology most commonly encountered.	2. Students will be able to identify origins of our present system of private ownership of real estate and will be able to identify various incidents of ownership which have developed.
3. The student will become familiar with the components of real estate, the physical attachments included within the meaning of "real estate," and the means of identifying a particular parcel of real estate.	3. Assigned reading, lecture-discussion, and review of legal descriptions, plots and surveys.	3. Students will be able to identify components of real estate, distinguishing fixtures from personalty, and will be able to verify accuracy and completeness of legal descriptions.
4. The students will become familiar with the various interests in real estate which can be owned separately or jointly, as well as the rights of owner arising from such ownership. Further to familiarize the students with the existence of rights in real estate which do not institute ownership, but which are nonetheless considered to be an interest in the real estate.	4. Assigned reading, lecture-discussion, review of various real estate instruments creating interests.	4. Students will be able to identify and distinguish between various interests in real estate as they relate to selection and preparation of real estate instruments which create such interests.

Objective	Experiences	Evaluation
5. The students will develop a basic understanding of the nature, operation and effect of real estate mortgages, including the interest created thereby, the rights and duties of the parties thereto, and the basic rules of their interpretation and enforcement. Further, the students will become familiar with the standard mortgage forms used in a general real estate practice and will be able to draft these mortgages.	5. Assigned, reading, lecture-discussion, review of sample mortgages on preprinted forms, preparation of skeleton mortgage instrument, expansion of checklist to include additional information necessary for preparation of mortgage instruments.	5. Students will be able to identify the essential elements of a mortgage, obtain the information necessary for preparation of mortgage, and prepare a mortgage.
6. The students will become familiar with the procedures and considerations involved in a real estate title closing, including familiarity with the various documents necessary to such purposes, and the various methods by which a real estate slaes transaction can be concluded, and will be able to draft the necessary documents.	6. Assigned reading, Lecture-discussion, review of sample real estate closing statements, expansion of checklist to include additional information necessary for preparation of closing statements.	6. Students will be able to identify items to be included in a closing statement and will be able to assemble and draft the documents necessary to conduct a closing based on given circumstances.
7. The students will develop a basic understanding of the effect of recording statutes as they relate to title and interests in real estate. Further, the students will know the procedures followed in recording an instrument and in locating a recorded instrument.	7. Assigned reading, lecture-discussion, review of step-by-step procedure followed in recording of instrument under normal circumstances.	7. The students will be able to record an insturment and find a previously recorded instrument in the public record.
8. The students will become familiar with the theory of real estate taxes, including determination of amounts due, responsibility for payment, and proration between various parties.	8. Assigned readings, lecture-discussion, review of the tax proration formula and its usage.	8. The students will understand the basis of real estate taxes and will pro-rate, between the buyer and seller, the taxes to be paid after a real estate transaction.

ILLUSTRATION 2

VALIDATION QUESTIONNAIRE

Course: Real Estate Transactions Instructor: ________________

1. List the learning experiences that you had in this class.

2. What particular experiences helped you to achieve the listed objectives of the course?

3. List those objectives that were addressed in the above.

4. Given the objectives of the course, what specific real estate tasks are you now able to perform?

5. What opportunities did you create or were provided for you to develop and acquire the task accomplishments of Item 4. Explain.

CREATING A GRASSROOTS ORGANIZATION TO ADDRESS TRANSFER AND ARTICULATION ISSUES IN PRIOR LEARNING ASSESSMENT

James Ball
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Jacqueline Johnson
Dixie Miller
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As a result of a concern for students who earn credits through the assessment of prior learning and for their smooth articulation into other institutions, program administrators from five institutions in Maryland began meeting about issues in prior learning assessment in the Fall, 1986 and then again through-out the summer of 1987.

The felt-needs precipitating these meetings were:

* The lack of information about prior learning assessment activities in the Maryland, D.C., and Northern Virginia area;

* An inability of community college students to transfer portfolio credits to most four-year institutions;

* The lack of a formal organization that would provide administrators of prior learning assessment programs the opportunity to share ideas and information, to discuss potential cooperative ventures and resources, and to learn what is current in prior learning assessment at area institutions.

In June, 1987, the program coordinator from Howard Community College contacted Dr. Brent Sargent, the Director of the Vermont State College's Office of External Programs, inviting him to consult with the ad hoc group about the issue of transferring experiential credits. The problem confronting community college

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program administrators was policy statements from four-year institutions making the transfer of portfolio credits difficult. Dr. Sargent provided the group with a centralized, state-wide model to consider -- one that facilitates the transfer of credits -- and the motivation to address the transfer issue "head-on."

Several factors combined to motivate the group of six to continue meeting regularly through-out the summer: the stimulation obtained from Dr. Sargent, the urgency of the issue facing the program administrators, and the unique characteristics of the ad hoc group members.

Among those unique characteristics of the ad hoc group members were a mix of administrators from both two- and four-year institutions representing both public and private colleges and universities, a respect for one another, and a shared and equal sense of responsibility and commitment to seriously address the issues.

As the group continued to meet, we found that there was much that we did not know about one another's programs, and, consequently, a large percentage of time was initially spent in sharing information about our programs. Ultimately, questions arose about how other institutions' programs were implemented and whether they were concerned about the transfer issue.

That prompted us to sponsor a conference to exchange information about programs and difficulties encountered in implementing them. Part of the material to be shared at that conference were the results of a survey that was developed and sent to as many program administrators at regional institutions as we could locate. Using membership lists from other professional organizations, each ad hoc group member was assigned between five and six institutions to contact so that we would have a current list of assessment of prior learning program administrators. Calling local institutions proved very time-consuming, as each initial call lead to, on an average, two other calls before actually talking with the person in charge of the programs. (Additional names of current program administrators were added to this original list once they were gathered from the survey. A final question on the survey was an inquiry about others who might be interested in attending the conference that we were planning to sponsor.)

The three program administrators from University Maryland University College, Dundalk Community College and Prince George's Community College developed the survey which was mailed in September, 1987, to forty institutions in the Baltimore-Washington metropolitan area, including institutions in Western Maryland and in Northern Virginia. The purposes of the survey were twofold: 1) to provide direction to our anticipated efforts in the area of articulation, and 2) to provide material on "current practices" that could be incorporated into our first conference.

The working definition of "assessment of prior learning programs" used in the survey included external exams, internal or departmental exams, portfolio assessment and non-collegiate learning. Survey questions dealt with transfer policies, methods of posting experiential credits, and awarding credit, as well as with student fees charged for the assessment of prior learning, payment for faculty members, and usages of the credits. A varied format of yes-no, forced-choice and open-ended questions was developed for the survey.

Enclosed with the survey was a cover letter that informed respondents of our collaborative efforts to address issues in the assessment of prior learning. That letter invited respondents to attend the November 20th conference that the ad hoc group was planning to hold and proposed the formation of a regional advocacy group of assessment of prior learning program administrators and faculty.

While awaiting the return of the survey results, the ad hoc members were planning the conference. We blocked out the morning session to address pertinent issues in the area of assessing prior learning, and the afternoon to address the question of formulating a regional advocacy group. Defining the logistics and the program for the conference consumed much of our meeting time as we entered the Fall of 1987.

Responses to the survey were returned by mid-October, to allow for analysis and interpretation prior to the November, 1987, conference. Based on the evaluations of the conference by participants, the **success** of the conference - attended by more 50 people - is credited to:

* The need professionals have in this field to network and to interact together;

* The diversity of perspectives presented by the speakers and their reputations;

* The structure of the program which was deliberately fast-paced and interactive.

This conference "hit a nerve" by bringing together professional program administrators, registrars, faculty and deans to collaboratively consider unresolved issues in the assessment of prior learning. Program speakers at the conference are well-respected educators: Dr. Morris Keeton, Director of the Council for Adult and Experiential Learning, Dr. Barbara Mayo-Wells, Associate Vice Chancellor for Registrations and Student Services at the University of Maryland University College, Dr. Larry Nespoli, Associate Executive Director of the State Board of Community College in Maryland, Dr. Rosemary Smartwood, Associate Dean of the Business and Management Division at Prince George's Community College, Dr. Michael Siegel, Assistant Dean for Faculty Development at the University of Maryland University College, Dr. Sandra Kurtinitis, Area Coordinator of Faculty and Academic Services at Prince George's Community College, and Mr. Dennis

Faber, Coordinator of Prior Learning at Dundalk Community College. By agreeing to present at this conference, these speakers lent credibility to our advocacy efforts, as well as acknowledging the viability of alternative and non-traditional learning, specifically, the assessment of prior learning. Each of these impressive speakers was asked to speak for ten-minutes, and then the discussion was opened to take questions and comments from the floor.

Prior to adjourning for lunch, the results of the questionnaire were presented. Of the twenty respondents, there were nine community colleges and eleven four-year institutions, and twelve public and eight private institutions. Based on this exploratory instrument, in the area of **external exams**, the following observations can be made:

* All respondents awarded credit for CLEP exams, although many had score requirements that differed from the ACE guidelines. There were institutional policies limiting the number of acceptable exams or the number of credits students are able to earn through external exams.

* Sixteen out of the twenty respondents awarded credit for DANTES; eighteen out of the twenty respondents awarded credit for Advanced Placement exams, with limitations on the acceptance of these credits similar to those for external exams.

* Only two out of twenty respondents charged fees to post external exam credit awards.

* External exam credits were treated as transfer credits in thirteen out of the twenty respondents.

In the area of **departmental exams**, the following observations can be made:

* Eighteen out of the twenty respondents offered departmental exams and charged fees for these exams ranging from full tuition to $5.00 per credit awarded.

* Twelve out of the twenty institutions transcripted credits as "Pass" only.

* Ten of the twenty institutions treated departmental credits as transfer credits as opposed as residential credits; six out of the twenty respondents treated them as residential credits.

In the area of **portfolio assessment**, the following observation can be made:

* All community college programs award credit on a course-by-course basis; half of the four-year institutions do.

The **principle issues** arising out of the survey results include:

* Inconsistencies in accepting portfolio credits as transfer credits, even in institutions having portfolio programs of their own;

* Differences in transfer policies among community colleges and four-year institutions as they relate to accepting credits earned through high school articulation agreements;

- Accepting other institutions' departmental exam credits as transfer credit into a given institution.

In the afternoon break-out groups, conference participants worked together to brainstorm structuring the organization created out of the morning session, the Experiential Learning Area Network (ELAN). The questions posed to each group were: What is the purpose of ELAN? How would you like to see the organization structured? What would be the targeted membership groups? What services would you like to see the organization provide to members? What are the immediate next steps that you would like to see ELAN take?

As a result of the in-put gathered from these break-out groups, ELAN members met in December, 1987, to decide upon the structure of it, and to develop job descriptions for each of the offices in the organization. Elections were held at that meeting; officers fulfill their role until November, 1988, at which time a second conference is planned. At that conference, new officers will be elected for the coming year.

Since the inception of ELAN in November, 1987, in addition to electing officers, a newsletter has been generated and distributed to all conference participants, and the subcommittee on transfer and articulation issues has met to begin to define its role in ELAN.

Future activities envisioned for this organization include:

- Planning an annual November conference;
- Collecting printed materials from member organizations as a resource library;
- Participating in regional professional organizations at the deans' level to inform and promote the assessment of prior learning;
- Promoting standards of good practice among member institutions;
- Producing and sharing research results;
- Facilitating transfer and articulation among member institutions.

In conclusion, the **key elements** of the success in creating ELAN, a grassroots organization, include:

- The mix of two- and four- year program administrators in the original ad hoc group;
- The equal and shared responsibility and commitment to the issues on the part of that ad hoc group;
- The realization that a formal advocacy organization was needed;
- The development of the questionnaire and its results;
- The circumstantial timing.

A NON-TRADITIONAL PROGRAM

by Bill Allan

Friends University is a small, liberal arts college in Wichita, Kansas with a Quaker heritage and background. It has traditionally been a commuter school with the enrollment that consists of traditional, under-graduate students. Four years ago, as the demographics in the area began to change, it became apparent that adult-education was going to have to be developed and promoted at Friends University. With that in mind the first graduate programs for the university were developed which included, a non-traditional program entitled "Family Studies/Family Therapy.

The history of Friends University goes back to the turn of the century when James and Anna Davis sought to create a college from a pioneer campus. This college was to include graduate programs as well as under-graduate programs.

James and Anna Davis, who purchased the Garfield University property in Wichita and gave it to the Religious Society of Friends, provided in the original agreement dated 7th of February, 1898: "That the name of the said school shall, for all time, be 'Friends University' and it shall be so styled in the entire conduct and maintenance of the said school." From the very beginning the intention was for Friends to be a University, in fact, and not just a college.

Further evidence of the purposes of the founders is stated in an indenture dated 10th of October, 1903: "The said donors hereby express their wish that the said trustee, party of the second part, will encourage through the medium of this University, the cause of higher education, adding to the University from time to time, as it may be able so to do, the various departments and branches of higher education and post graduate work.

The Instructional Purpose expressed in the Mission Statement is that "Friends University services students who respect the mission and standards of the institution without discrimination as to race, color, national origin, sex, age, creed, or handicap. The ideal is a 'way of life' motivated by a common purpose to achieve human relationships based on friendliness and the extension of goodwill across social, cultural, and religious boundaries. With in this openness to diversity the special educational needs of the founding church, the Mid-America Yearly Meeting of the Society of Friends, and of Wichita and the surrounding area can be met."

After recognizing that the primary instructional programs at Friends University consist largely of under-graduate studies, the Mission Statement declares, "Other educational programs may be offered when there is demonstrated need, sufficient enrollment, and available resources."

PLANNING

Planning for the beginning of the non-traditional program began many years ago. Over the past eight years of number of planning studies have related to the feasibility of a graduate program. The first of these activities was a study in 1978 sponsored jointly by the Wichita Chamber of Commerce, Kansas Newman College, and Friends University conducted by a professional group from the University of Denver, headed by Dr. Allan Pfnister. The purpose was to ascertain the feasibility of a Law School in Wichita.

The Law School study indicated a mixture of interest in the community for a local law school. Success for such a venture is contingent upon a donation or campaign in the million dollar plus category. There is potential for such support in the community but at present awaits a catalytic event to make the venture feasible.

From the Spring of 1979 through 1982, a special committee approved by the Faculty of Friends University investigated the feasibility of Graduate Programs. The committee consisted of key administrators, and a representative from the trustees, the alumni, and each academic division interested in a Graduate Program. In the three year period the committee met over 20 times and discussed many aspects of proposed Graduate Programs. (The minutes of the Graduate Committee are on file in the Office of the Academic Dean.)

The Graduate Study Committee conducted a survey of the Friends University constituents which indicated a relatively strong interest in graduate programs by alumni, faculty, administration, and students. The trustee response was considerably less. Areas receiving significant support were Human Services, Business Administration, Religion, Music and Education.

The principal conclusion of the Graduate Study Committee was that feasibility for one or more initial graduate programs was dependent upon the following factors:

1. A strong related under-graduate study.
2. A faculty competnet for Graduate instruction.
3. Sufficient special funding for library, scholarships, endowed chairs, etc.
4. A carefully developed curriculum.

Another conclusion of the Graduate Study Committee was that in some academic disciplines: Church Music, Human Services, Law, and Religion there would be no significant local competition; but Business Administration and Education would require a special emphasis to attract a significant share of the local market.

On October 19, 1979, the Friends University Board of Trustees approved the Friends University Master Plan 1979-85. The plan included 30 goals. Goal number 17 states, "To be prepared for any viable options for offering Graduate Studies." Excerpts from the Master Plan relative to goal 17 reads in part: "Since there are few private colleges or universities within a two hundred mile radius that offer graduate studies, the question arises frequently, 'should Friends University have a Graduate Studies Program?' . . . Today's world of changing moral values accompanied by the restrictions on public institutions make the need for the kind of graduate studies that Friends University should offer even more important."

Dr. J. Roger Miller, President of Millikin University, Decatur, Illinois, was assigned by North Central Association of Colleges and Schools to make an advisory visit to Friends University, April 28-29, 1980. The last two sentences of his report read: "One last comment--there is talk on campus about creating graduate programs. I personally feel it would only further dissipate their now meager resources." The faculty and administration readily concurred with the evaluation of Roger Miller at that point of time.

Since 1980, there have been several significant positive changes at Friends University. In the November, 1981 meeting of the Board of Trustees, an Ad Hoc Committee of three trustees was named to make an indepth study of the financial condition of Friends University. As a result of this study the Trustees in session in February, 1982 recommended significant cutbacks in the operational budget, including downsizing of both the faculty and administrative staff. Three majors (Agriculture, Drama, and Home Economics) were eliminated due to small class enrollments and inadequate number of majors. At the same time three new majors were developed . . Computer Science, Mass Communication, and Early Childgood Education. The faculty was reduced from 60 to 45 and the administrative staff was reduced by 35 percent. Reductions in personel were appropriate to bring the faculty and staff personnel into more realistic ratios with student enrollments.

In addition to cutbacks in personnel and operational expense plans were initiated to increase student enrollments. These plans included improved recruiting techniques, enlarging the Admissions staff, developing new academic programs, attracting students from non-traditional populations, and major efforts for improved reports for the Fall Semester is as follows:

YEAR	FALL HEAD COUNT	FTE
1979	909	735
1980	935	746
1981	891	724
1982	813	657
1983	761	628
1984	804	672
1985	870	724

Friends University confirmed its interest in serving the community and building stronger marriages and families in 1976 by opening the Friends Center on Family Living. The Center was organized to provide workshops, seminars, training resources, and academic work offered through the Human Service degree.

The Center began with two full-time faculty and one part-time instructor. The program then grew to include three full faculty positions and two part-time positions with the academic program including associate degrees in early childhood education and family life and bachelors degrees in family life and social service administration. In 1981, the Center was downsized to two full faculty positions and one part-time position. This change was part of the University's effort to make its academic programs stronger, to remove duplication of efforts in the classroom or its community involvement and to use the resources we have most efficiently. The results of this change have brought a stronger Human Service degree with specialization available in Marriage and Family, Social Service Administratioin, and Counseling Psychology. These changes aligned early childhood studies with the Education Division and the Marriage Encounter program was taken over by Mid-America Yearly Meeting. The Center is still involved with the community by offering Engaged Encounter weekends, hosting nine workshops and seminars and an area wide conference on the family in alternating years. This major conference brings nationally known experts to our campus to share their knowledge with the community of helping professionals in the south/central Kansas area. The Center also provides counseling services to the campus and the local community.

Since 1976, the Human Service degree program and the Center on Family Living have grown stronger and larger. The cutbacks in 1981 did remove or realign some programs and numbers, but since 1983 the Human Service/Psychology degree has regained the number of majors necessary to be a strong degree and most of the community outreach or service programs have been strengthened. The Human Service/Psychology degree has over 70 primary or secondary majors. This number has held steady for the past five semesters.

Our graduating classes increased from the four graduates in 1978 to an average of 15 graduates per year 1981-1985.

The Friends University Self-Study for institutional re-accreditation in 1984 recognized the potential of graduate study in these words, "In summary the idea of graduate programs is valid for Friends University . . . when these steps for a stronger under-graduate program are achieved and specific resources are found . . . there can be a venture for achievement of James Davis' vision of a true university."

In May, 1985 a new degree completion program for students 25 years and older, with a minimum of 62 college credit hours, was launched. These students are working toward a Bachelor of Science degree with a major in Human Resources Management. Classes were formed with beginning dates in May, June, September and October, 1985. To date 82 full-time students are enrolled in this specialized program. This program demonstrates the ability of Friends University to successfully launch new educational studies.

In the Summer of 1984 a feasibility study for the Degree Completion Program was conducted in Wichita by Bill Boyle from National College of Education, Chicago, Illinois, and Fred Garlett, Director of Marketing for External Programs at Friends Unviersity. Frequently as they were inquiring in each of the 35 marketing sessions for the under-graduate program in Human Resources Management they were asked, "When is Friends going to offer coursework at the graduate level?"

Subsequently, as representatives from Friends have visited in the community marketing the HRM program the question relative to graduate work constantly arises. The same question is posed both by alumni and current students.

In addition to the perceived need in the business community, there is also a need in the social service areas and the church community to have training and graduate education in the helping profession; especially marriage and family counseling. This proposal for a Master of Science degree in Family Studies/Therapy is our response to that perceived need.

In the Fall of 1985 three surveys were made to ascertain the feasibility of a Master of Science in Family Studies/Therapy program. The three groups surveyed were alumni of Friends University, current senior under-graduates with majors in Human Services and Psychology, and professional persons practicing in the field in the Wichita area.

A cover letter, program outline, and survey questionnaire were sent to approximately 500 members of the graduating classes of 1981, 82, 83, 84, and 85, of Friends University.

This total included Associate and Baccalaureate degree recipients from the five graduating classes for whom the Friends University Alumni Office had a current address. Fifty of the questionnaires (10%) were returned. Of the 50 respondents, seven (14%) indicated that they would be interested in such a program next fall were it to be offered. An additional 10 respondents (20%) would be interested in such a program at some future time.

Current senior under-graduates students in the Social Science Division at Friends University were surveyed using the same questionnaire as was sent to the alumni. Twenty-eight seniors responded to the questionnaire. Of the 28, three (11%) indicated an immediate interest in the program were it to be offered in the Fall Semester 1986. An additional 16 students (57%) indicated that they might be interested in the program at a later date.

A telephone survey of churches in the metropolitan Wichita area was conducted by the Social Science Division. Ninety of the 440 churches listed in the yellow pages of the Wichita telephone directory were contacted. Of the 90 ministers responding, 28 (31%) indicated that they have personnel at their church that would be interested in the program within the next two years.

APPROACH

This Masters of Science degree is a 36-45 hour degree program divided into 8-week modules taught only at night, one night a week for two years, designed primarily for the adult learner-full time worker. The program enables students to maintain a full-time job for field placements while attending school. It also affords them the opportunity to begin therapy training toward certification in A.A.M.F.T. (American Association for Marriage and Family Therapist). The non-traditional nature of the program (i.e. 8-week modules taken one module at a time, classes conducted year-round, and weekend training and supervision made available to the adult learner) make the program non-traditional in nature and our delivery system has proven to be very successful as seen in the strong enrollments of students and good reputation already developed in the professional community.

Another component of the non-traditional program is the fact that each class (20 students) forms a group to itself for the two years of the program which enables them to have not only a support group but a sense of professionalism and collegiality that strengthens students, our program, and the school as well.

Coursework beyond the degree program will be an elective option for students wishing to pursue therapy certification. Possible advanced training coursework would include the following courses:

a.	Advanced Marriage/Family Therapy	3 semester hrs.
b.	Group Dynamics and Therapy	3 semester hrs.
c.	Human Sexuality	3 semester hrs.
	TOTAL	9 semester hrs.

SCHEDULE

The twenty-four hour core coursework will be offered in eight 8-week modules. The 8-week schedule will correspond to the existing 8-week instructional format used for night class instruction at Friends University for five years (See Appendix D). Each course will meet once weekly for 4 hours for eight weeks, or 40 contact hours. Students will be reviewed academically after the first four coursework modules before beginning the remaining section of the core. At this point in the program students will select either the family studies option or the family therapy option. This supporting coursework will be taken either concurrent with modules four through eight or immediately following completion of the 8-module core. Students will be reviewed comprehensively upon completion of the 8-module core. A maximum of five years will be allowed to complete the degree program.

The program has been in operation for two years and the first class will graduate this May. Some are involved in the field of family studies with two-thirds of the class being involved in family therapy. In addition to the work being done in the program the students will then be continuing post-graduate work in field supervisio[illegible] family therapy hours, and family life educator certification.

Appendix B

Friends University
Tentative Proposal
Master of Science in Family Studies/Therapy

INSTRUCTIONS: Read and examine the tentative proposal of a Master of Science in Family Studies/Therapy. Complete the survey feasibility questionnaire. Return the completed questionnaire in the self-addressed, postage paid envelope no later than December 12, 1985.

I. Core Curriculum -

Counseling Theories in Marriage and Family	3 hours
Marital Therapy	3 hours
Family Therapy	3 hours
Marriage/Family Assessment/Appraisal	3 hours
Life Cycle Development	3 hours
Professional Issues, Ethics and the Law	3 hours
Theology of the Family	3 hours
Research Design and Statistics	3 hours
TOTAL	24 hours

II. Supporting Course Work-

A. Individualized Study (Family Therapy) 12 hours

Practicum I Practicum II	Supervised experience in marriage and family therapy.
Internship I Internship II	Supervised practice in marriage and therapy - field settings.

B. Specialized Course Work - Family Studies	12 hours
Preventive Strategies in Family Life Educ.	3 hours
Psychodynamics of Family Life	3 hours
Directed Study in Marriage/Family Ministries	6 hours
TOTAL	12 hours

Students wishing to pursue therapy certification are encouraged to continue advanced training beyond the degree.

C. Possible Advanced Training Courses

Advanced Marriage/Family Therapy	3 hours
Group Dynamics and Therapy	3 hours
Sexual Therapy	3 hours
TOTAL	9 hours

III. Program Schedule

The twenty-four hour core will be offered in eight 8-week modules. Each course will meet twice each week for two and one-half hours per session for eight weeks, of forty contact hours. Students will be reviewed after the first year (4 modules) before they continue their next four modules. At this time they will also select their supporting courses which can be taken concurrent with the the second four modules.

IV. Admission Procedures
- A. Baccalaureate Degree in Behavioral Sciences, Religion, Psychology or related fields - 3.0 GPA preferred.
- B. Coursework in Abnormal Psychology, Personality Theory, and Research Procedures suggested.
- C. Appropriate GRE score
- D. Interview with admission committee

Appendix C

Draft Proposal
Master of Science in Family Studies/Therapy
COURSE DESCRIPTIONS

I. Core Curriculum (24 hours)

COUNSELING THEORIES IN MARRIAGE AND FAMILY - A comprehensive exploration of theory in family studies. The role of theory in empirical investigation; conceptual frameworks; strategies of theory building; examination of systems theory and other models useful in the interdisciplinary study of individual, couple, and family behavior. 3 semester hours

MARITAL THERAPY - An introduction to the theories and techniques of marital therapy. Conjoint, systems, and psychodynamic theory approaches will be studied and used in this content and experience course. 3 semester hours

FAMILY THERAPY - An exploration of theories of family therapy and applied techniques relevant to those theories. Supportive principles and methodology in the area of functional family problems and needs will be examined and practiced. Systems, communication, and structural approaches will be utilized. 3 semester hours

MARRIAGE/FAMILY ASSESSMENT AND APPRAISAL - Examination of measurement methods appropriate for individual, marital, and family research and diagnoses. Case studies, interview techniques, tests and personality inventories will be studied and used to gain experience in scoring and interpreting. 3 semester hours

LIFE CYCLE DEVELOPMENT - An overview of child, adolescent, and adult development from a life span perspective. Family life styles, pair-bonding, and family structures and interactions will be considered and related to societal, personal, and Christian values. 3 semester hours

PROFESSIONAL ISSUES, ETHICS AND THE LAW - An introduction to issues relevant to ethics and laws pertaining to marital and family therapy and ministry. Standards, professional identity, and private practice will be considered and related to societal, personal, and Christian values. 3 semester hours

THEOLOGY OF FAMILY - An exploration of foundational biblical and theological issues as they relate to marriage and the family. An integrated approach to theology and counseling will be applied. 3 semester hours

RESEARCH DESIGN AND STATISTICS - A study of research strategies, statistics, and techniques relevant to family studies. Emphasis will be given to developing evaluative skills, interpreting statistical data as well as designing, conducting, and reporting marriage and family research. 3 semester hours

II. Supporting Courses (12 hours)

A. Individualized Study (3 semester hours each)

PRACTICUM I PRACTICUM II	Supervised experiences in marriage and family therapy.
INTERNSHIP I INTERNSHIP II	Supervised practice in marriage and family therapy-field settings.

B. Specialized coursework - Family Studies (12 hours)

PREVENTIVE STRATEGIES IN FAMILY LIFE EDUCATION - The philosophy and methodology of preventive strategies in family life education. 3 semester hours

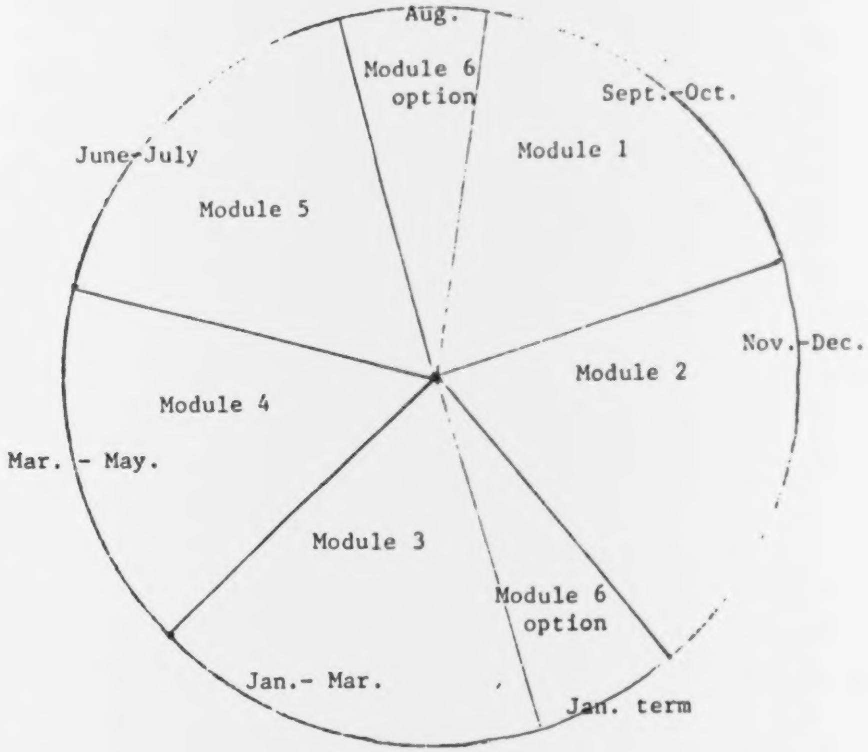
PSYCHODYNAMICS OF FAMILY LIFE - An enriched understanding of the structural and strategic approach to marriage/ family relations. 3 semester hours

DIRECTED STUDY IN MARRIAGE/FAMILY MINISTRIES - A course arranged as an independent study to pursue research, experience, and interest in special areas of family life education or ministry. 6 semester hours

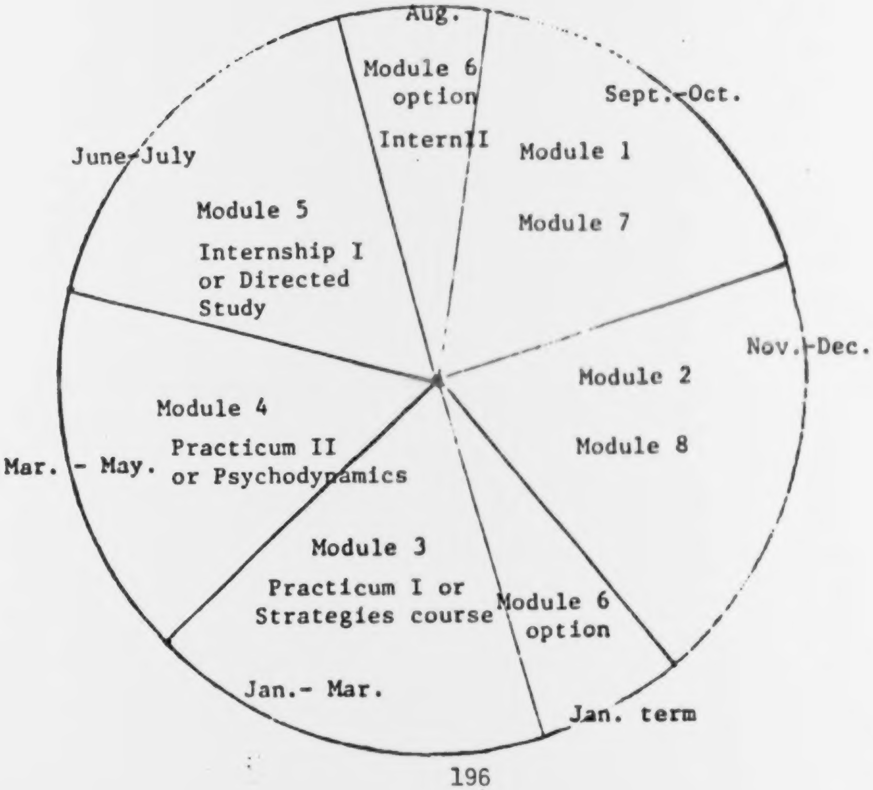
Appendix D

Degree Time Chart

Year One


Aug.
Module 6 option
Sept.-Oct.
Module 1
June-July
Module 5
Nov.-Dec.
Module 2
Module 4
Mar. - May.
Module 3
Module 6 option
Jan.- Mar.
Jan. term

Year Two & Following Years


Aug.
Module 6 option
InternII
Sept.-Oct.
Module 1
Module 7
June-July
Module 5
Internship I or Directed Study
Nov.-Dec.
Module 2
Module 8
Module 4
Practicum II or Psychodynamics
Mar. - May.
Module 3
Practicum I or Strategies course
Module 6 option
Jan.- Mar.
Jan. term

A COST EFFECTIVE GRADUATE PROGRAM FOR THE SMALL COLLEGES: NEW METHODS AND MARKETS FOR AN OLD MODEL

A. Patrick Allen

Introduction

Small colleges all too often try to act like the big ones. Many small colleges seem to operate under the assumption that they are just like the major universities except "more friendly." The fact that being small brings with it an entire array of competitive advantages such as flexibility, adaptability, and community seems to go unnoticed.

This emulation is no where more apparent than in the area of graduate studies. Where is it written that a small school must deliver instruction in sixteen week semesters, offer at least eight courses for selection, and allow students to drop in and out of the program? For that matter, where is it written that large schools must deliver instruction in this manner? The reason *we* do it this way is because that is the way *they* do it up the road. We somehow find a good deal of satisfaction and comfort in being just like our neighbors, even if it means operating with an instructional model that does not fit the structure, strategy, or culture of the institution.

The real problem is that many small colleges simply can not afford the "traditional" delivery system for graduate instruction. The challenge for the small school is to deliver *quality*, *cost effective* graduate instruction. The big schools may not be the best model for this approach.

In this paper, one small university's entry into graduate education will be examined. Its rationale for breaking away from the traditional model as well as its philosophy and program design will be shared. Finally, some thoughts about graduate education in the small college will be offered in an attempt to generate some discussion about distinctive avenues to quality graduate education.

The Traditional Model Just Didn't Make Sense (or Cents)

For the past ten years, Friends University in Wichita, Kansas has been eying the adult-graduate education market. Wichita has a population of about 300,000, and there are only three institutions of higher education (one large, two small) serving the metropolitan area. Obviously, there were a lot of adults in need of the higher learning. In all honesty, however, the concern for the adult learner was as much motivated by the adult's ability to contribute to the revenues of the institution in the form of tuition (the administrative view) and by the desire to teach advanced courses (the faculty view) as by the desire to meet real needs in the community (the official view). I suspect that this situation is not unusual. Many universities proclaim that they are interested in the adult learner as a whole person. This can be loosely translated to mean that they are interested in the adult's mind and money.

In any case, the faculty and administration had a common goal. The problem was that the traditional model for graduate education did not make sense (cents). The institution was committed to providing a quality program, but it also had to pay its own way. The university was not in a position to subsidize any new projects.

(Incidentally, you may be wondering why Friends University calls itself a university even though it is just now getting into graduate education. I have asked the same question. The best explanation that I have heard is that it has to do with the frontier spirit in the 1890's west of the Mississippi. In keeping with the idea that you can be anything if you wish hard enough, institutions of higher education in the plains states often called themselves universities in the attempt to underscore their high quality and lofty dreams. [We now call this practice image building.] It was similar to the practice of taking a picture of a farmer kneeling in a wheat field in the attempt to attract settlers to lands that were producing "head-high wheat.")

Study after study from consultants as well as from the faculty came to the same conclusion: the university had a good faculty and an outstanding undergraduate program, but the resources were simply not available for graduate education. Graduate education, that is, in the traditional model. The faculty was not large enough to provide the necessary offerings without hurting the undergraduate program. There was also a concern that the market was not strong enough to guarantee a steady flow of students to the program. The university, being small and lacking excess resources, could not deal with a variety of financial and organizational problems caused by enrollment fluctuations due to the unpredictable behavior of the part-time student. Therefore, the university would have to wait until better financial times before entering the arena of graduate instruction.

Still, many wondered if these conclusions were unavoidable. Is there not some way for an institution with limited resources to provide high quality, cost effective graduate instruction? The answer for Friends University was the "Total Package" Concept.

The Total Package Concept

In reality, the Friends University total package concept is a combination of instructional and curricular strategies which individually are not all that innovative or new. The power and attraction of the program seems to come from the combination of these simple strategies.

First, graduate study at Friends University is an "all or nothing" proposition. That is, students are admitted to the program under the assumption that they intend to complete the degree. All students must be committed to finishing their course of study in less than two years. There are no part-time students, and there are no provisions for dropping in and out of the program. The programs are priced and marketed as a total package - the current price for the Masters in Management Program is $6600. Students and professors think in terms of the program rather than a series of courses. There is no need for course registration once the student is in the program.

Second, the students move through the program in groups. The structured curriculum in the first year allows the university to bring together a group of 20 to 24 students who will progress through the program together. Since all students are committed to the same goal (finishing the program), they become a natural support group. After two or three courses, it is obvious that each group develops a strong identity and becomes very close. Professors often comment that they feel like an outsider when they begin a course with a group that has been together for half a year or so.

Third, the courses are offered sequentially - one course at a time. Rather than taking three courses together over a semester, students concentrate on one course at a time. Each course lasts six to eight weeks.

Fourth, a collaborative or process approach to instruction is utilized. Since all students must hold full time employment and have significant work experience to be admitted to the program, the collaborative approach is ideal. These working adults have much to bring to the classroom, and come to appreciate the fact that they can learn from each other as well as from the professor. (I said "come to appreciate" because although students are enthusiastic about the process approach when it is explained to them, they come to class the first night ready to sit in rows and take notes on the professor's lecture. It takes several weeks [and sometimes many weeks] before our adult learners are comfortable with the process approach that they so enthusiastically endorsed during the admissions process.)

Finally, the total package concept involves limited enrollments through selective admissions. Students must hold full time employment and have significant work experience to be admitted to the program in management. Students just completing the undergraduate degree will be asked to reapply after several years in the work force. The average age in the program is thirty seven, with eight years of management experience.

The University also limits the number of groups that start each year. In the management program, for example, one group starts each semester. Since it is a two year program, only four groups will be active in any one year - two in the first year or core program and two groups in their second year. Several other graduate programs at Friends start only one group each year.

To summarize, the Total Package Concept at Friends University utilizes several curricular and instructional strategies including: "it's all or nothing" admissions, move through the program with a permanent group, sequential course offerings, emphasis on collaborative learning, and limited enrollments through selective admissions.

Advantages and Opportunities for the Model

For the small college, there are many advantages to this approach to graduate education. First, it is very simple to administrate. A tightly structured curriculum offered sequentially eliminates the need for student registration each semester. Once a student enters the program, both the student and the university know exactly what courses will be taken over the next two years, and exactly when courses will be offered.

Also, since the revenues can be projected quite accurately for the entire two years once a group begins, budgeting is a simple procedure. Instructional costs can be accurately estimated and students can work out precise payment plans with the Finance Office because the program carries a package price. Once in the program, students do not have to worry or contend with tuition increases.

A second advantage is that since the courses are offered in sequence - one course at a time, it does not place as much of a strain on the teaching faculty. Only one or two faculty members are teaching at any one time. And since the entire instructional program for each group can be determined when the group begins its first class, faculty know exactly when they are scheduled to teach and can plan their schedules accordingly.

Third, the total package concept provides some scheduling flexibility. Since students move through the program in a self-contained group, there is no need to follow the semester calendar. When twenty four students are admitted, the group can start. If by the first day of the semester there are not enough students to form a group, the start date can be delayed without impacting the program. This flexibility eliminates the problem of what to do with a class that is needed by the students, but has only three or four enrolled. No need to choose between teaching a class that is not cost effective or cancelling a required course.

Fourth, this type of delivery system can be easily modified to fit a wide variety of academic disciplines. The College of Business at Friends offers or is designing degree programs in Management (MS), Management Information Systems (MS), Business Administration (MBA), and Financial Planning (MFP). (Several of these programs will operate from a common core.) The College of Arts and Sciences offers degree programs in Family Studies/Therapy (MFST) and Education (MAT), and is proposing graduate programs in Ministry and Church Music.

Each academic area has modified the Total Package Concept to fit the unique requirements of their discipline and course of study. Still, the program formats are strikingly similar and the advantages discussed above are maintained.

The final advantage of this graduate model is that it is cost effective. The Master of Science in Management program (MSM) in now completing its second year. With nearly one hundred students in the program, annual revenues exceed $250,000, and total program costs are running between $125,000 -$140,000. It does not take a financial genius to realize that the program is making a large contribution to the University.

And the contribution is not only in terms of money. It is hard to place a dollar value on the new computer labs, additional library holdings, and new faculty members. These new "resources" are available to undergraduates as well as graduate students. Without doubt, the graduate program has contributed to the quality of the entire College of Business.

Closing Comments

The traditional approach to graduate instruction is simply not feasible for many small institutions. Non-traditional approaches such as the one described above hold real promise for smaller institutions who have the desire and commitment to provide quality graduate instruction, but who must also be concerned with the bottom line.

In my view, these non-traditional approaches will become the traditional approach for the small college in the next decade. The main reason is because it makes good sense to meet the learners on their own terms. This is particularly true when it can be done without sacrificing our traditional commitment to quality. Small colleges can follow a distinctive path to quality graduate education. Perhaps there is a lessen here for the big schools as well. Time will tell.

A final note: the first group in the MSM program is scheduled to graduate next month. There are nearly 200 names on the waiting list for next Fall's class of 24. After two years of operation with nearly 100 students, only one student has withdrawn from the program.

PROFESSIONAL EDUCATION THROUGH LIBERAL LEARNING: NEW WAYS OF KNOWING

Renee Gilbert-Levin

As a professional graduate program that has as an integral part liberal education skills, the non-traditional graduate program of DePaul University's School for New Learning touches at least four topics addressed by this conference - developing innovative curricula through interdisciplinary programs, linking technology (as part of specific professional concentrations) with non-traditional education, developing an interdisciplinary graduate program, and integrating the arts and sciences. The program offers a Master of Arts Degree for the working professional. The two components of the program indicate its dual objectives: 1)The Professional Concentration and 2) The Common Curriculum. The Professional Concentration offers development in areas of expertise and specialized skills. The Common Curriculum offers the student an opportunity to refine broader skills that have been recognized as contributing to the success of the professional. We call these skills Liberal Learning Skills. In the Professional Concentration students link technical expertise to professional development by expanding the definition of expertise. Expertise comes to be defined as specialized proficiency that is effective because of exposure to and refinement of habits of mind derived from liberal studies. This mix of specialization and broader training reflects the way in which liberal learning has been linked to professional education and reflects a distinctive integration of the arts and sciences into a professional graduate program.

The two main questions facing those involved in the initiation and continuation of our program have centered on the relationship between professional and liberal education - 1) what does professional study have to do with liberal learning? and, 2) how does one deliver liberal learning to working adults? Although many non-traditional programs favor liberal education, they manipulate the relationship between professional life and liberal learning differently. The distinctiveness of DePaul's model arises from the way it conceives of liberal learning for professionals and the way in which the abilities of professionals are delivered to students.

Renee Gilbert-Levin
Academic Mentor
School for New Learning Master of Arts Program
DePaul University
25 E. Jackson
Chicago, Illinois 60604

The Professional Concentration

While the development of the Liberal Learning Skills takes place in a group setting, the acquisition of professional, specialized skills takes place through the individually designed and executed learning plan of each student. Together with an Academic Mentor and a Professional Advisor, the student designs his or her own Learning Plan and proceeds to carry it out during the course of the program simultaneously with the Common Curriculum.

The underlying rationale of this part of the program, the Professional Concentration, parallels that of Donald Schon in The Reflective Practitioner.1 The notion is that the practitioner addresses certain objectives on the job, but without reflecting on them. If those same objectives were addressed consciously, within a larger framework of learning and assessment, performance would be greatly enhanced. Therefore, the specialized skills required by every profession are supplemented by broader queries even as the students focus on professional expertise.

In using their work sites as learning laboratories, students' learning skills are transformed through a process that makes efficient use of prior knowledge, motivation, proficiency, and expert support. What happens is something like this.

Ordinarily, practitioners must be task oriented; they have to carry out a specific task with a clear set of objectives that tend to be concrete in nature. They must perform or execute the task. Once they enter our program, however, they go to work armed with an additional objective. They are going to execute the task, but with the objective of learning, as well. No longer are they merely carrying it out. While they perform they ask themselves such questions as, "how am I doing it?" (with which skills?), "why am I doing it?," "how well am I doing it?," and "what am I learning?" Where previously students may have operated at a certain level of proficiency, they did so in the absence of the conscious application of skills and abilities. Now they revisit their work assignments with greater consciousness and operate at a higher level of proficiency; they become "reflective practitioners."

The cognitive process students engage in is one of translating their work experience into academic structures. The process of translation is akin to the experience a novelist engages in when attempting to translate the experience of life into a fictional medium, and yet convey truths. There is no real commonality between the two realms - that of fiction and that of reality other than that which is brought into existence through language. In our program students are also juggling two realms - the realm of the work place and the realm of the academy. Language is the great mediator here too. The guidelines and structures we have developed have been intended to facilitate this process of translation.

The following constitute the structures according to which students fulfill program requirements. Please refer to the description of the Professional Mastery Criteria on the following page.

1) Professional Mastery Criteria to be fulfilled by each student in their Professional Concentrations
2) Mastery Statements that direct the acquisition of mastery toward specific criteria
3) Learning Activities which indicate how students are going to fulfill the criteria
4) A Learning Plan that synthesizes the above into a coherent and manageable package
5) Contracts for undertaking the learning which specifically indicate how the Learning Activities fulfill professional and graduate level requirements of the criteria
6) Mastery Assessments which provide narrative evaluations of the student's work

Because the program is individualized and does not prescribe courses, criteria are employed. In addition, the methods by which students choose to learn are open. The criteria establish guidelines for study as well as graduate level and professional standards. The contracts are there to direct the student's cognitive processes in translating a variety of learning experiences into measurable and assessable forms. They direct the students to ask themselves "how, specifically am I going to demonstrate fulfillment of this criterion?" By modelling such questions, the students become aware of their mental maps and accustom themselves to developing specificity in the solving of problems.

The Professional Mastery Criteria recognize skills, abilities and areas of specialized knowledge that are appropriate for a wide variety of professionals. Such categories as theories, research, specialized skills, communication modes, organizational dynamics, temporal-cultural-global contexts, and moral reasoning are areas that professionals must master if they are to be empowered in their professional environment. They must be able to frame unprecedented problems, invent and execute yet to be tested procedures, and to evaluate the effects of their innovations. While the above categories are professionally focused and contain recognizable areas of specialization, the broad abilities of problem solving, critical thinking, proactive learning, and analytical reflection are clearly present. Therefore, even while preparing students to gain a high level of mastery in their profession, much of this preparation goes beyond the acquisition of technical or specialized skills. This broader base is emphasized in this program by the inclusion of a component that specifically addresses what we have referred to as Liberal Learning Skills.

THE MASTERY CRITERIA

PROFESSIONAL CRITERIA

Students will acquire and demonstrate, pertinent to their Professional Concentrations:

1. Knowledge of the main theories that guide and explain practice in a given profession.

2. Ability to engage in modes of research appropriate to a profession.

   Satisfaction of this criterion includes the ability to design a graduate-level research project; to formulate various research strategies and define the powers and limitations of each; and to select and use a research strategy appropriate to the research project. It also includes the ability to use both verbal and quantitative analysis in the manipulation of research data, at levels appropriate to the Professional Concentration.

3. Ability to demonstrate expertise in the specialized skills of the profession.

4. Facility with the communications modes that practitioners use in their professions.

   Satisfaction of this criterion includes the ability to write and speak effectively in a variety of settings; to use a computer as a tool of communication at a level appropriate to a given profession; and to participate actively with professional colleagues in the activities of a professional organization.

5. Knowledge of the organizational and interpersonal dynamics within which professionals design their roles and set their tasks.

6. Ability to interpret the issues and problems of a profession within larger temporal, cultural, and global contexts.

7. Ability to apply moral reasoning to issues of values and ethics in the profession.

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The Liberal Learning Skills

Just as the characteristics of successful professionals were the basis for the Professional Mastery Criteria, they were also the basis for the Liberal Learning Criteria. Because one of the central tensions for us has been that between a professional and liberal education, the question, "why is liberal learning important for the professional?" had to be directly addressed. The rationale underlying this part of the program is derived from the now-documented profile of the effective professional -one who has mastered both the specialized skills of the expert and the broader or liberal skills addressed above.

The initial research carried out to investigate the above hypothesis took the form of professional interviews. Successful and seasoned practitioners were sought out for their expert opinion concerning those factors which they deemed most important for practitioners to succeed in their fields. The responses all clustered around skills and abilities and the program took this focus as its direction. These initial findings were supported by the research documented in such articles as George Klemp's "Three Factors of Success,"2, Arthur Chickering, "Education, Work, and Human Development,"3, Chambers, C. "Liberal Learning and Working Adults,"4 and the 1986 Report of the Association for the Study of Higher Education.5

The direction chosen, then, was to approach a liberal education through skill development rather than through engagement with the content per se of liberal arts disciplines. We look to the liberal arts as the tradition from which liberal learning skills come. Instead of content mastery we look to the application of extractable and clearly articulated liberal learning skills so that professionals can directly practice and apply skills which are made real for them in an appropriate and applied setting. They are skills that enable the practitioner to operate in a complex environment characterized by ongoing change. Rather than operating within the relatively isolated dimension of technical specialization, the successful practitioner must be able to function within a constellation of relationships and is often called upon to contribute to the changing environment, if not to institute change itself.

From the liberal arts we extracted performance-oriented abilities, such as critical thinking/problem solving, moral reasoning, communication and interpersonal skills. We chose these as the crucial skills for students to develop in order to achieve an integration of academic and professional competence. The quality of their professional training is a measure of how well they understand and can apply the liberal habits of mind derived from these skills. (See Liberal Learning Criteria listed on the following page.) These criteria are fulfilled developmentally in the residential, group learning part of the program called the Common Curriculum. Students attend weekly group meetings called colloquia. These colloquia are skill centered but are organized according to topics. Each colloquium meets 4-5 times, 4 contact hours per meeting, over a period of 10 months.

The focus of each colloquium, regardless of topic, is the development of the Liberal Learning Skills. To achieve this focus faculty must subordinate subject matter to skill development. An active, participatory classroom is prescribed. Instructors must design and execute exercises, discussion, and assignments that offer opportunities for skill development and skill assessment. While students are introduced to content during the 5 week long colloquia, their mastery is of such skills as problem solving and communication, for example, rather than the content of management texts or theories of rhetoric.

The first two colloquia are planning colloquia. The first one, Managing Learning in Professional and Academic Settings introduces the students to the underlying rationale and theories of the program and its criteria for assessment. Students are introduced to adult and experiential learning theory. The concepts involved in learning management and active learning are introduced by demonstrating the different role students play in this program where the burden of responsibility is placed on the student (with, of course, a balanced infusion of challenge and support.) They learn about identifying and using resources, both human and material, access to information, research strategies, initiating learning encounters, and so on.

In an attempt to foster control of their own learning styles we ask the students to reflect on themselves as learners. We use such diagnostics as Kolb's Learning Style Inventory, the Myers-Briggs Type Inventory and a variety of professional skill assessment diagnostics. The goal is to encourage adaptive competences in learning.

In this orientation to the program, an overriding metaphor takes shape - that designing their own program becomes a major problem solving exercise - the first of many they will engage in. And indeed, the process of designing an individualized curriculum that carves out of an established profession a personalized agenda, or of pioneering a new path through outworn areas, constitutes a rich problem upon which to build learning skills. The Academic Mentor plays an important role of facilitation, offering the student training in such problem solving models as those mentioned earlier. These models are directed toward development of critical thinking skills.

As the student proceeds in the program, applying the Liberal Learning Skills in their professional and academic settings, they

School for New Learning Master of Arts Program

THE MASTERY CRITERIA

THE LIBERAL LEARNING CRITERIA

Students will acquire and demonstrate the following core abilities that will be assessed in the colloquia:

I. THE CAPACITY TO ENGAGE IN SELF-DIRECTED, ACTIVE LEARNING

a. actively initiate own participation
b. show grasp of material from readings and other sources
c. engage with reading assignments and share insights with colleagues
d. relate own experiences to concepts under discussion

II. THE ABILITY TO FRAME AND SOLVE PROBLEMS

a. debate and argue issues from several points of view
b. conceptualize issues in a variety of ways
c. organize and assign priorities to issues; decide what to solve first
d. develop plausible explanations
e. create innovative solutions to complex problems

III. THE ABILITY TO MAKE DECISIONS INFORMED BY VALUES

a. identify the values which inform personal and professional behavior
b. recognize how values influence decision-making in various settings
c. understand the processes by which values are formulated
d. evaluate both immediate and long-term implications of decisions

IV. A FACILITY IN BASIC COMMUNICATION MODES; THE DEVELOPMENT OF TOOLS OF EXPRESSION

a. write clearly and concisely using proper grammar, diction, spelling and style appropriate to a given audience
b. speak effectively in a variety of settings

V. A FACILITY IN INTERPERSONAL SKILLS

a. function as part of a team and in various capacities as both leader and participant
b. motivate colleagues
c. mediate and negotiate among conflicting points of view
d. empathize with others and respect humanity of one's colleagues

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are asked to periodically assess their development of these skills. Built into the program are a series of Skill Assessment Colloquia in which the students are asked to reflect on their use of the Liberal Learning Skills in their places of work and in their professional development.

What we have found is that, as in the development of professional proficiency, the student practitioners have already, although unconsciously been applying these skills. They enter the program and are introduced to the skills by name. Gradually, they reflect on, conceptualize about them, and, finally, at a higher level of awareness apply these skills. In essence, they learn about and refine the skills in a process that follows Kolb's experiential model of learning[6] - beginning from an unconscious use of the skills through their concrete work experience, they move to reflective observation of the skills we name for them. They develop concepts about the skills, actively experiment with them based on these concepts and are back at concrete applications with a deeper understanding and greater ability to consciously use the skills. They have begun to incorporate the Liberal Learning Skills as proficient professionals.

Notes

1. Schon, D., pp.21-76
2. Klemp, G., pp.102-109
3. Chickering, A., pp.5-15
4. Chambers, C., pp. 95-107
5. Stark,F., et.al., 3rd Report, 1986
6. Kolb, D., p.21

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LIBERAL ARTS AND BUSINESS EDUCATION AT THE UNIVERSITY OF REDLANDS

by Neal Mangham and Elizabeth Watson

During the last decade a great deal of attention has been given to the perceived narrowness of professional education in the United States, particularly that in Schools and Colleges of Businesses. At the University of Redlands we have shared some of those concerns, but have also had other reasons for attempting to introduce liberal education into professional programs of all types. Some of those reasons may be clearer if we examine briefly the University as an institution.

Redlands is a small private school located in the San Bernardino Valley of California, between Palm Springs and Los Angeles. For over eighty years it has seen itself primarily as an undergraduate institution emphasizing the liberal arts to a select student body. During the late 1960's the University added the Johnston Center for Individualized Learning which still operates as a place where students may design their own programs in collaboration with a faculty member. Somewhat later the University added the Alfred North Whitehead Center for Lifelong Learning in an effort to reach returning students and mid-career professionals seeking the bachelor's and master's degrees in business, education, and in a multi-disciplinary liberal arts curriculum. Today the University has approximately 4,000 students. They are divided nearly equally between traditionally aged residential students pursuing mainly liberal arts degrees and adult part-time students pursuing professional degrees in non-traditional formats. Most of the programs for adult students are not residentially based but are taught in regional centers throughout Southern California.

The University has residential professional programs in Communicative Disorders, Music, and a small number of other disciplines. From the very inception of these programs the University has struggled with the question of their relation to the liberal education that is the core of its self-image. That struggle became even more intense with the addition of the non-traditional programs for adults. In this paper we will focus on the business degrees offered through the Whitehead Center, which are the largest of those non-traditional programs.

The programs of the Whitehead Center are concentrated, in that each three-unit course includes only twenty-four hours of seat

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time and depends on student work outside the classroom to accomplish the bulk of the learning that takes place. The undergraduate degree also allows for the accreditation of prior learning through challenge exams and experiential portfolio essays.

We find ourselves, then, in a situation of offering professional preparation for the most goal oriented of audiences, in a concentrated format, and in an institution which places great value on liberal education. Some attention to the humanities and social sciences was probably inevitable. Added to that has been our own experience and that of many others in the business world.

Faculty and Administration of the Center

The full-time faculty and academic administration of the Center consists of a group with a variety of backgrounds, many of whom have substantial experience outside the academy. The Academic Dean, for example, holds a Ph.D. in history but has also been a senior manager in very large multinational companies. The Chair of Business and Management is a Ph.D. qualified sociologist who also holds a law degree and who has practiced in corporate settings, while the director of the M.B.A. program holds the doctorate in organizational behavior and has extensive experience as a private consultant outside the academy. Others among the group have similar experience. Many of our colleagues come from more exclusively academic backgrounds, but with a special thrust.

The Chair of Academic Advising, for example, is a sociologist who has taught in her discipline at several institutions. She has had considerable experience, however, in working with the adult returning student. The Director of Humanities is a former chair of the Philosophy Department in the Arts and Sciences program and has had only University experience, but he has spent much of his career in the Johnston Center where non-traditional approaches are traditional.

Given the experience of having succeeded in business and adult education from a base of liberal education, we are naturally sympathetic to the ideal of blending that base with our programs. Our students come to us with their general education requirements already complete, usually at an institution other than our own and often several years in the past, so we are forced to look within our curriculum for opportunities to introduce it. We are confirmed in our feeling that such an approach is valuable by the work of others in the field in recent years.

Rationale for Inclusion

We see both practical and theoretical considerations that argue for the inclusion of liberal education within the core of professional programs, rather than as "add-on" courses. Our students are not liberal arts majors who plan to enter business, but are in programs leading to the Bachelor of Science in Business and Management, Bachelor of Science in Information Systems, and the Master in Business Administration. They are in a condensed program which, at the undergraduate level, is a degree completion sequence comprising essentially the "major". Further, they will be moving into a world in which new employees find a liberal arts degree a hindrance to finding a job, a fact of special importance to our returning students.[1]

It is, on the other hand, clear that liberal arts degrees, or at least the perspectives and skills one normally associates with such degrees, are helpful to people later in their careers. In study after study executives and senior managers have stressed that the most critical skills for their success are the ability to lead and the ability to learn. One example, cited by Michael Unseem, will suffice. Prior to its break-up, AT&T was one of the largest and most financially successful firms in the world. The company undertook a study of its long term employees who had reached executive levels between 1960 and 1980 with results that surprised some. Looking at the background of 274 managers and executives who had at least twenty years with the firm, AT&T found that 23% had engineering degrees, 32% business, and 43% degrees in the humanities and social sciences.[2]

Further suggesting a stress on liberal education has been the work on business leadership done during the last few years. John W. Gardner, for example, has defined nine tasks he finds common among the very best of leaders, as defined by their peers. They are:[3]

1. Envisioning Goals
2. Affirming Values
3. Motivating
4. Managing
5. Explaining (i.e. teaching and interpreting)
6. Achieving Workable Unity
7. Serving as a Symbol
8. Representing the Group
9. Renewing and Creating

While some of these are taught in specific business curriculum, and some are probably best developed over time, at least five are derived from that complex of studies traditionally identified as "liberal education". In another paper Gardner addressed the nature of leadership, and found it to include such characteristics as the abilities to look beyond the immediate and grasp complex relationships, political skills, creativity, and a tendency to think of the long term.[4]

If Gardner and Unseem are right, and we believe they are, it behooves a program claiming to prepare students for executive and leadership roles to attend to the liberal arts. For us, however, these practical issues are not the only reasons for doing so. We also believe there are sound academic reasons to include a heavy emphasis on liberal education in all our programs.

Our students are mature and experienced human beings. They bring to the classroom a wealth of business and professional skills on which we attempt to improve through theoretical and skill based programs, but they bring more than that. These students also bring extensive experiences of life, very often without having seen clearly the connections between the two kinds of experience. We believe that the disciplines and perspectives of the liberal arts help people make those connections. We also believe that people learn more easily and retain skills longer when they connect their studies to that which they already know and to activities going on in their lives outside the classroom. We introduce and maintain a focus on liberal education in our degree programs in different ways but with a common intent.

It is at this point necessary to be more specific as to our understanding of "Liberal Education". In much of the discussion that has gone on recently, liberal arts has been used synonymously with humanities. We include material drawn from the humanities, but do not confine ourselves to them. Material is also drawn from the social sciences and, to some extent, from the natural sciences. In general, though, we do not intend a focus on disciplines or areas, but on intent. We look backwards to the classical debates over liberal education, particularly as they were expressed in nineteenth century America. The discussion then was between the proponents of rationale scientific mode of analysis represented by Thomas H.Huxley and the older rhetorical and literary models represented by Matthew Arnold.

Not completely won over by either argument we prefer to return to the original concept of logos, and attempt to combine both "reason" and "language." Our approach, then, is to stress analysis of both kinds, a broader view of all subjects, and an attention to the historical. We do bow to Cicero in attempting to emphasize in virtually all classes both written and oral communications skills. On the other hand, we emphasize the use of mathematical analysis as fundamental to the senior project that each undergraduate completes and the MBA practicum. We do not hold to the Trivium or the Quadrivium of the humanists, but acknowledge our debt to their example.

The Bachelor of Science in Business and Management

The BSBAM degree is based on a 36-unit core of studies in traditional areas. Specific courses include marketing, accounting, finance, computer technology, organizational behavior, and so on. As a mechanism by which to introduce students to the liberal arts, and to introduce ideas and approaches that will remain a focus throughout the course, we have developed two specific courses.

One of these we call "Philosophical Foundations of Management." It is the first course all undergraduates take, and was developed by the Associate Vice President of our area, a philosopher trained at Oxford, and the Center's Director of Humanities, a philosopher from Yale. The course has two parts and is team taught. One instructor has principal responsibility for the humanities, while the other is mainly engaged in helping students develop "life learning essays" as a part of their development of a portfolio. The course is also where students begin an on-going relationship with an academic advisor who helps each person develop a degree completion plan.

The humanities section of the course focuses on seven theories of human nature which have influenced management behavior directly or indirectly. The goal is to train the student to apply theory to specific management and career issues. The personalities and theories we currently include are Plato, Christianity, Liberalism, Marxism, Freud, Existentialism, and Behaviorism. They are further organized in three types: theories of transcendence and salvation; theories of activity; and theories of inwardness. Students read from original sources and from three literary works. Currently in use are The Color Purple and Death of a Salesman, as well as another book selected by the instructor. Each literary work is read and analyzed in the context of one of the theories, in part to illustrate the typology we use. Naturally there are many other organizing schemes one could use, but this one works for us.

The humanities instructor assigns two theory essays and one process paper scheduled so as to allow each student to address the three types of theories. Each student is trained to read and analyze original and secondary texts, to discuss the application of theory to business practice, and write clearly. The portfolio segment provides a theoretical framework within which the student can reflect in a disciplined way on his or her experience, and the learning they derived from it. Students learn to use the Kolb - Lewin Learning Theory model to organize their thoughts, and produce several essays. The Kolb model seems especially useful to us, as it allows students to focus on the progression from theory to process and eventually to outcome.[5] The essays eventually produced in the portfolio segment may be submitted for award of credit when they are in an area in which the University offers courses. In addition to learning, and re-learning how one studies, students are exposed to two teaching styles, two outlooks, and see modeling of disagreement between colleagues on matters of substance.

Since these students are mainly drawn from business and professional backgrounds, their essays are very often addressed to courses in those areas. Even where that is not true, students are challenged in class to relate, for example, their knowledge of the Sociology of the Family to the basic assumptions and positions they have developed. Through discussions, debates, lectures, and group activities they relate their life experiences to the theorists they are studying and to their professional lives. By the end of the course they have, if we are successful, become accustomed to examining issues and positions in broader contexts than the technical content of the course might suggest.

The result is that nearly every course takes on a broader nature than it otherwise might. Marketing plans are developed with explicit discussion of the ethical and philosophical issues involved. Annual reports are written to include longer term issues in addition to data based on accounting practices. Business law is studied within the historical framework surrounding specific legislation and court cases. That goal is approached in two ways: through faculty development activities and though the development of curriculum for the courses.

Since we do not have sufficient full-time faculty to teach all courses we offer we have come to depend in large part on adjuncts. They are practitioners in their disciplines who also have academic credentials. Since classes are taking place at many sites, and are taught by part-time faculty, the core curriculum of each is developed under the leadership of a full-time faculty member. Each professor has flexibility to develop specific assignments and the like, but core subject areas are specified for them. In developing those core areas effort is expended to be sure that the base developed in the first course is reinforced. Since the part-time faculty consists of people who may not have the training they need to address these issues comfortably, significant work is done on their development. We periodically bring together the disciplinary faculties to hold workshops which are explicitly designed to address such issues. Further, we give part-time faculty research grants each year, encouraging them to address broader issues within their disciplines rather than focusing on narrow topics. Finally, we select texts and other materials which clearly lend themselves to the broader approach we espouse.

At the end of the undergraduate sequence we bring the students full circle. The last content course in the program is on Business Policy and Ethics. That course is most emphatically not a course in "rules of behavior" but returns to the question of philosophies and their relationship to business. Students examine the bases on which various ethical systems rest and are asked to develop policies with those systems explicitly in mind. They are encouraged both to identify and to challenge the positions they and their classmates take.

Master of Business Administration

At the graduate level our students are in a rather traditional MBA sequence. It is not one of the newer sequences which results in an "MBA in" a technical field, but returns to the original concept of the MBA as a generalist's degree in management and business. It includes content courses in all the usual areas -- accounting, finance, economics, strategic planning, information systems, marketing, and the like -- but a good deal more as well. The degree consists of a 45-unit core which begins with a course called "Contemporary Issues in Management".

That course is one in ethics, and is based on a study of such issues as the source of ethical systems, their applications in current and classical western businesses, and the nature of the corporation in western thought. Students are asked to understand and identify the source and growth of the positions they and their classmates take and to examine issues facing businesses today from the perspective of those positions. Contemporary issues are studied using a case study method, with cases developed or adopted from elsewhere which lend themselves to the broader approach we take. At the end of the course students have developed an understanding of business which focuses on it as a human and social institution rather than on questions of profit and loss. As the students in the first undergraduate course do, these graduate students examine primary documents drawn from Roman and Greek thinkers, the Christian tradition, and the eighteenth and nineteenth century in Europe, applying them to contemporary cases.

Midway through the sequence MBA students take two courses in Organizational Behavior and in Human Resource Management. In these courses students return to the historical and sociological approach of the first course. They examine individual and organizational behavior within the context of systems of thought and cosmologies on which they are based. The enlightenment view of rational, perfectible humanity is traced to its manifestations in twentieth century organizational and motivational theory, while Christian views of the fall are examined for their influence on views of human behavior. The Materialist and Realist outlooks which developed in the latter half of the nineteenth century are examined to discover their contribution to an emphasis on "the bottom line" and short term thinking. Students once again use the case study method to examine contemporary problems in terms of these classical positions. Choices of corporations in benefits packages, for example, are examined for the attitudes they represent, and in light of social understandings of Corporate Responsibility developed over time.

The capstone course in the sequence is in International Business. Students examine laws and practices in the international arena, but are once again asked to do so in a broader context. They return to the philosophical, historical, and social bases of western thought, and are asked to compare those to similar systems developed elsewhere. The international aspect of business has already been introduced in content courses by including work on international monetary exchange, intercultural marketing, and the like so that students have some basic familiarity with the issues involved. Here they are asked to look at those issues in a global framework rather than an exclusively western one.

In all these courses, and indeed in all courses in the sequence, students are asked to introduce one other element into their thought, that of change over time. In each course some attention is given to historical antecedents of current practices, and students are asked to understand how those practices have changed over an extended period. In every course, but particularly in the first and last one, they are invited to think of the future with the same long term view. Each class undertakes to identify developments in contemporary business they believe to be harbingers of future change. The important issue is not whether they are right, but whether they have developed the habits of mind necessary for such long range thinking. Those habits, we are convinced, arise from liberal education more quickly and directly than from technical professional courses. We are also convinced that the breadth and depth we seek will benefit the student in both professional and personal pursuits.

Conclusion

The degrees described here are relatively new to the University of Redlands, having grown out of earlier degree sequences in business. We cannot demonstrate their short term effectiveness at this point. Initial indications are positive in the kinds of students being attracted and in their reports on the impact these approaches have on them professionally. One MBA student, for example, is a department head in a major regional hospital near the University. She was asked, as are all students, to bring issues arising in her professional life to class for discussion during the Ethics class. She told us that she found it possible to introduce class discussions into business meetings at the same time. Near the end of her first class she reported to the instructor that, as a result of that introduction of explicit historical and philosophical discussion into the work place, she was asked to chair the hospital's ethics committee. She is the first non-physician to hold that position and continues to report success in opening up the committee's discussion by introducing more than a code of conduct approach to the issues it confronts.

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2. Ibid, p. 78.

3. John W. Gardner, The Nature of Leadership, p. 5.

4. Gardner, The Nature of Leadership, p. 6.

5. For an introduction to the framework of this model, see D.A. Kolb and M. Goldman, Toward a Typology of Learning Style and Learning Environment, M.I.T. Sloan School of Management, Working Paper Number 688, 1973.

LIBERATING EDUCATION FOR A POST-INDUSTRIAL CULTURE

Donald B. Pribor

In his book, The Closing of the American Mind, Allan Bloom concludes:

> It is difficult to imagine that there is either the wherewithal or the energy within the university to constitute or reconstitute the idea of an educated human being and establish a liberal education again.

This statement comes at the end of a book which along with many other studies document the disarray of education in America. For many this intellectual turmoil is cause for alarm or worse yet, despairful resignation. However, chaos may be a prelude to the creation of a new vision. This paper offers a new vision of education grounded on an overview of the glories and reasons for dissolution of liberal education as expressed in Neo-Thomism taught in Catholic colleges and universities during the 1950s.

The Neo-Thomistic Ideal of Liberal Education

In the Thomistic vision each human person is a spiritual soul individuated by a material body. Personhood develops through the expression of two human faculties: 1) intellect which is closely linked to or identical with mind or rationality and 2) will which is closely linked with feeling awareness. Reality has two aspects: natural which can be known by the unaided intellect and supernatural which can be partially known through the gift of Faith. The will has the "liberty" to choose the Good as presented to it by intellect and Faith. The highest expression of intellect is theology which separates, explicates and then integrates metaphysics with revealed truths. Metaphysics, in turn, integrates all other areas of knowledge. The highest expression of will is art which creates: 1) developing personhood guided by the moral and transcendental truths of theology and metaphysics and 2) emotional symbols expressing these truths in ritual and the fine arts.

The natural human, e.g., the liberally educated male citizen in the Greek city-state or John Henry Newman's "gentleman", expresses the human soul by the developed intellect directing the creations of the will. These "mature" humans create harmony in nature by ruling women, children, and all other uneducated humans and by treating all things in the world in accordance with their natures. Thus, a liberal education integrates intellect and

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will in an individual who then promotes harmony in society and in nature. Free will in conjunction with "original sin" promotes disintegration of intellect and will and the consequent disharmony in the individual, in society, and in the world. Religion guided by theology is a channel for God's Grace to reestablish harmony and to subordinate the natural (secular) realm to the supernatural (sacred) realm.

This ideal of Christian liberal education was expressed and partially realized in 13th century Medieval culture. Aspects of secular or Christian liberal education produced a flourishing humanism at many other moments in history including classical Greece and pockets of education during the 1950s. However, this ideal has fundamental flaws, e.g., white males dominating everyone else, and omissions, e.g., recognition of the unconscious and of autonomous feeling awareness. Cultural developments -- especially modern science, German existentialism, and modernism -- which sought to rectify these flaws and omissions have irreversible dismantled the ideal of liberal education.

Dissolution of Liberal Education

By insisting that all concepts must be directly or indirectly translatable into operational terms, modern science excludes questions involving transcendental ideas such as being, soul, good, and beauty. In practice if not in theory, modern technological cultures have adopted the "philosophy" that science is the only legitimate way of knowing reality. As a result, intellect is cut off from theology, metaphysics, and the highest expressions of will. Under the direction of science, will becomes power independent of morality and transcendental meanings expressed and nurtured by religion and the fine arts.
Metaphysics and theology, which still may guide will, are displaced into the category of subjective knowing associated with feeling awareness.

Beginning with Descartes and culminating with Nietzsche and Heidegger, modern philosophy has evolved to the position that there is no absolute or approximation to absolute, objective truth. All knowing is finite and contextual thus eliminating metaphysics and theology as they traditionally have been conceived in Western culture. Now, morality and the fine arts are guided by feeling awareness and finite contextual knowing which is partially subjective.

At the turn of this century, Freud and Jung discovered the unconscious which is recalcitrant to rational control and is the locus of dreams, fantasies, the demonic and creativity. At about the same time, between 1880 and 1930, a cultural movement in the fine arts known as modernism flourished in Europe and America. In this cultural experiment, the unconscious and feeling awareness become the sole guide to art, at first in aesthetics and then in daily life. As Daniel Bell comments:

> ...modernism -- took over, in effect, the relation with the demonic. But instead of taming it, as religion sought to do, the modernist culture began to accept the demonic, to explore it, to revel in it, and to see it (correctly) as the source of a certain kind of creativity....[then] ...there arose the demand for the "autonomy of the aesthetic," the idea that experience, in and of itself, is of supreme value: Everything is to be explored, anything is to be permitted....[A] second aspect ... was to root all authority, all justification, in the demands of the "I," of the "imperial self."

The individual and societal harmony grounded on the ideal of liberal education was shattered into autonomous intellect producing bureaucratic society at war with autonomous will glorifying materialistic self-expression. Metaphysics and theology have become irrelevant, and as Daniel Bell observes:

> For the modern, cosmopolitan man, culture [modernism or post-modernism] has replaced both religion and work as a means of self-fulfillment or as a justification -- an aesthetic justification -- of life.

Intellect has become mere rationality whose highest expression is mathematics, and will has become mere feeling whose highest expression is the Faustian restlessness of spirit, never fulfilled but always seeking new experiences.

Human Awareness of Self

Instead of dissecting the human soul into intellect and will, personhood may be described as a self which is "seen" to emerge, differentiate, develop through stages, and sometimes evolve to transcendent levels of awareness. The idea of self is distinct from the idea of awareness, but the two notions are complementary. Thus, the new born baby has an "awareness" of changes within its body which enable it to maintain homeostasis and express instinctual needs. This awareness begins with sensations and emotions associated with instincts which then differentiate into feeling evaluations. The baby creates the primordial, conceptual dichotomy of "I" vs "not I" which consolidates into an ego consciousness representing, so to speak, the emerging self. Ego consciousness in direct association with feeling evaluations differentiates into feeling awareness. The child's ego becomes intellectual when it begins to formulate concepts which he uses to represent his experiences to himself and eventually to others. As the child further differentiates, intellectual awareness of the ego continuously changed by learning begins to overshadow feeling awareness, though the latter is always present to some extent.

Intellectual awareness produces conceptual knowing which is communicated by objectively agreed upon language symbols. In contrast, feeling awareness produces non-conceptual knowing which is communicated by emotional symbols open to diverse subjective interpretations. Those people committed to the ideal of liberal education tend to think that concepts and thoughts symbolized by words and sentences at least approximately represent and correspond to an objective reality existing independent of our being aware of it. Consequently, descriptions and theories are thought to be substitutes for direct awareness of reality. In fact, a language model is thought to be even better than a direct awareness because the model attempts to eliminate ambiguities and details not pertinent to the aspect of reality we wish to focus on at a particular moment. Thus, intellectual awareness which can be made at least approximately objective by means of language can be talked about whereas feeling awareness remains subjective and therefore cannot be discussed objectively.

However, another way of describing symbolic representations of intellectual and feeling awareness is that symbols are occasions for an individual to be aware of some aspect of reality. The set of symbols does not "correspond to" reality; rather it directly or indirectly stimulates the person to enter into what may be called an awareness event. On the one hand, an awareness event always is a communication between an "I" and a something else ("not I") in a context which defines a particular relationship between "I" and "not-I." On the other hand, one's experience of an awareness event always is such that "I am aware that I am aware of something." The source of awareness of awareness may be called the I-Self.

The I-Self is the "grounding" of intellectual and feeling awareness events which may produce conceptual and non-conceptual knowing. Thus, the complementarity of I-Self and pure awareness (awareness of awareness) may be acknowledged through knowledge resulting from awareness events. However, direct experience of I-Self and pure awareness may occur only after negating all awareness events by first suppressing all knowing. This journey toward the I-Self by "no knowing" is rightly called mystical. The I-Self cannot be known but it may be experienced.

It is important to distinguish between the I-Self and the I of an awareness event. The I always is a "part" of a particular awareness event. As such it is the actualization of some potential to be aware of some aspect of reality. At the same time, the I also is defined by some aspect of reality to which it is related by means of an awareness event. When a person thinks about himself or answers the question, "Who am I," he is aware of a concept of I considered as object which is determined by a combination of past awareness events. Thus, the I is always defined by a context or collection of contexts which in turn is defined by: 1) predispositions within the individual to interact with reality in particular ways and 2) particular types of changes in reality. In contrast, the I-Self is the grounding of many different awareness events all seen to be related by their participating in the I-Self. Thus, while the I-Self enters into human awareness as a result of awareness events, it is not limited to or defined by the context or sum of contexts of particular awareness events. Though brought into existence -- so to speak -- by particular awareness events, the I-Self transcends all awareness events.

Awareness events take on meaning and reality only by participating in a unified whole called stream of consciousness stemming from the I-Self. This stream of consciousness is like motion; it is continuous. Just as motion is not the resultant of an infinite number of instantaneous motions, so also stream of consciousness is not the resultant of an infinite number of awareness events. Rather awareness events emerge from and participate in the I-Self by being "parts" of the unified, ongoing, flow of the stream of consciousness. An awareness event is something like a drop of water which one can imagine to be part of a river. The drop of water, summoned into existence by the imagination, appears as an isolated unit which participates in the unity of the river and is carried along by its flow. Thus, the flow of the stream of consciousness is the "fourth dimension" of an awareness event. Just as time is the fourth dimension of bodies moving in space, so also the "duration" of the flow of the stream of consciousness is the fourth dimension of awareness events. However, duration here refers to the sequence pattern of process which is non-measurable rather than to the measurement of time which involves comparing motions to some standard unit of periodic motion.

Human stream of consciousness is characterized by the emergence of the I-Self simultaneous with the emergence of awareness events. The I-Self organizes awareness events into an intellectual and feeling aspect. The intellectual aspect is concerned with awareness events producing concepts which the I-Self can put together to form a thought. This is analogous to the way we analyze motion. By means of calculus we meaningfully talk about motion at a point and the summation of "instantaneous" motions; so also with the intellectual aspect of human awareness. A concept resulting from an awareness event and represented by a word is analogous to motion at a point, and thought, represented by a statement, is analogous to a summation of instantaneous motions over a distance (a definite integral). In intellectual awareness, the I-Self is overshadowed by the relative autonomy of thoughts and the formal relationships among concepts that make up thoughts. In contrast, as a result of being more closely linked to the stream of consciousness, feeling awareness emphasizes the I-Self which gives unity, individuality and a process dimension to concepts and thoughts. From a purely formal aspect, symbols representing awareness events exist independent of duration or process. They are Plato's eternal forms. However, these symbols may be viewed as pointing to awareness events emerging from the stream of human consciousness. In this way symbols, especially the emotional symbols of feeling awareness, indirectly point to the I-Self.

When awareness is looked at in this way, modernism may be viewed as a desperate, unsuccessful search for the I-Self. The dismantling of the ideal of liberal education may be the occasion for diverse religions mutually supporting one another in facilitating individuals experiencing the I-Self. The I-Self cannot be known so that no religion has dogmas about IT to superimpose on others. However, the I-Self may legitimately be denoted by diverse names such as God, the Christ, the ground of being, the One, etc. Each formulation of theology and ritual among diverse formulations may best serve a particular group of people who share a particular tradition.

The Dynamics of the Two Ways of Knowing

Ordinary individual consciousness, then, is expressed as a mixture of conceptual and non-conceptual knowing. Conceptual knowing begins with abstracting (or creating) universal ideas from concrete experiences of individual things or events. The ideas are interrelated by means of inductive and deductive reasoning to produce rational understanding. Because this understanding begins with abstraction from sensation of material things, it is in itself nonmaterial, i.e., spiritual. The quintessence of spiritual knowing is mathematics and mathematical physics. Non-conceptual knowing begins with a feeling evaluation of an individual, concrete experience. The symbolic representation of this evaluation may be refined into figurative language such as metaphors and personifications. By means of figurative language a person may express mundane or profound aspects of human consciousness in the form of stories. In contrast to spiritual knowing, these stories are earthy/mystical. The quintessence of earthy/mystical knowing is poetry or music.

Because conceptual knowing consists of universal ideas that in the Western philosophical tradition were thought to be identical to or aspects of the essence of a thing or event, this knowing expresses what may be called essential consciousness. In contrast, because non-conceptual knowing consists of representations of individual things or events "existing" in a concrete context, this knowing expresses what may be called existential consciousness. Essential consciousness produces conceptual knowing as a result of an awareness of I vs not-I. This kind of consciousness is time independent, involves rational feelings, and produces dichotomies which may be non-equal or co-equal complementarities. In contrast, existential consciousness produces non-conceptual knowing as a result of an individual being embedded in a concrete context. This kind of consciousness is time dependent, involves sensual feelings, and produces interdependent relationships.

The awareness events of essential consciousness involve conceptual communications which produce conceptual knowing. The awareness events of existential consciousness involve non-conceptual communications which produce non-conceptual knowing, see fig. 1.

Awareness events always have a physical aspect because they directly or indirectly result from an interaction between a subject and an object by means of sense organs. The object is some change in pattern of an aspect of reality which stimulates the sense organs to respond. The sense organs respond by producing a pattern of nerve impulses which represent the change in pattern in the object. Just as sense organs are predisposed to respond to particular types of pattern changes in reality, so also the brain is predisposed to activate neuron circuits which represent a particular interpretation of the object. Knowledge is the physical brain representation of objects associated with the phenomena of awareness events. Thus, a concept refers to the phenomenon we have described as an awareness event, and a knowledge category is a concept plus its physical representation in the brain. In like manner, a statement of knowledge is a thought plus its physical representation in the brain. Something analogous to this happens in non-conceptual knowing. Moreover, the physical representation aspect of knowledge is a modification of one's innate predisposition to be aware of aspects of reality. Therefore, just as innate, inherited brain circuits predispose one to "experience" certain types of awareness events, so also knowledge predisposes one to "experience" modifications of these same awareness events.

Knowledge, then, may be thought of as a subjective pattern which has an active and a passive aspect. This pattern is active in that it determines how a particular aspect of reality will be evaluated. It is passive in that it can be modified by the objective aspect of an awareness event. Looked at in this way, knowledge may be unstable and creative or stable but noncreative.

Unstable, creative knowledge is part of a sequential, circular interaction between an individual and reality. Some aspect of reality stimulates the production of knowledge which in turn influences how the same or similar aspect of reality will stimulate the creation of another awareness event. This new awareness will modify the knowledge pattern. In a sense, "order" in reality determines "order" in knowledge which in turn determines the "order" that is seen in reality.

Some knowledge patterns are more stable than others. When an individual creates a particular, stable knowledge pattern, he tends to maintain this pattern rather than allow it to be continually modified by new awareness events. This stable, noncreative knowledge is part of a one-way linear interaction between an individual and reality. The knowledge pattern determines the individual to interpret a particular aspect of reality in only one way. Stable knowledge is like a habit or an instinct. A particular circumstance serves as a trigger for the production of a "prepackaged" response. Stable knowledge is a substitute for the vicissitudes of direct experience of reality. The real world is reduced to one's knowledge pattern. However, the possibility always exists for stable knowledge to breakdown and again become a part of a circular creative process.

The usual notion of truth states that order in knowledge at least approximates some objective order in reality. But from the above description of knowledge, this correspondence theory of truth is inadequate. Another more adequate notion of truth is based on distinguishing two kinds of knowledge each corrected by its characteristic truth criteria. These are logos knowledge (conceptual knowledge) corrected by logos truth criteria and eros knowledge (non-conceptual knowledge) corrected by eros truth criteria.

Logos truth is analogous to an organism's adaptation to a particular environment. If the logos knowledge of the organism enables it to survive and prosper in that environment, then the logos knowledge is "true." If the organism's prosperity begins to decrease, then the logos knowledge may be "rectified" by adjustments of the organism's homeostatic mechanisms, by evolution of new, more appropriate homeostatic mechanisms which involves creation of new logos knowledge, or by movement of the organism to another environment where the present logos knowledge is "true."

Survival as a truth criteria is absolute for all nonhuman species. For humans, logos truth is relative because one may define survival in purely material terms, in psychological terms, in spiritual/mystical terms, or in some combination of all these facets. Logos truth also is relative because there are some situations -- in fact, many -- to which it cannot be applied. Adaptation in these situations must occur by eros truth criteria.

Eros knowledge is like logos knowledge in that it involves a circular interaction of an individual with reality. However, instead of superimposing some set of categories onto reality, eros knowledge disposes one to seek out and become one with some aspect of reality. Instead of the "givenness of things" stimulating the individual to create knowledge categories, one is drawn out to some thing or person that is valued in itself rather than rationally understood. Eros knowledge is passion which is both active and passive; one seeks and is drawn out. Whereas logos knowledge is concerned with achievement and power, eros knowledge is concerned with affiliation. Logos knowledge is abstract; whereas eros knowledge is concrete. Logos knowledge focuses on particular aspects of reality and in creating form, it emphasizes the ordered, relational separation of things from one another. Eros knowledge surrounds things and in creating value and vision, it emphasizes the interconnectedness of things.

Eros truth is individual adaptation for the sake of harmony among a group of things including that individual. Eros knowledge of the interconnectedness of things is true if there is harmony; it is false when the group begins to disintegrate. The tennis player who curses the wind on a windy day has false eros knowledge of the factors which may affect one's game. The individual who is depressed or apathetic due to repressed anger has false eros knowledge of one's psychic unity. Like logos truth, eros truth depends on a concrete context. Antisocial behavior is false with respect to a particular society. However, it may be true with respect to another context. The German citizens who fought the Nazi regime had eros knowledge which was false in one context but true in another. Moreover, the relativity of truth extends to the interaction of logos and eros knowledge. Some aspects of college education is logos true but eros false. The teacher who "knows" his subject area but disregards his students is logos true but eros false. At the same time, the kindly, loving teacher who does not adequately know his subject area is logos false but eros true.

It is important that logos truth criteria not be applied to eros knowledge or eros truth criteria applied to logos knowledge. The two kinds of knowledge with their characteristic truth criteria should remain separate but integrated. Each type of knowledge is a physical representation plus awareness in the context of a circular interaction, and awareness always involves intellectual and feeling aspects. Therefore, while creating and correcting logos knowledge, one should seek existential consciousness based on eros knowledge. This is what is meant by having a "gut understanding" of some abstract idea. At the same time, while creating harmony in eros knowledge, one should seek essential consciousness based on logos knowledge.

A New Vision of Education

A new vision of education is based on a philosophy grounded on "finite" metaphysics and epistemology which are co-equal and complementary. This philosophy has the following characteristics:

1. There are two ways of knowing, eros and logos knowing which are relatively autonomous. Eros knowing is judged by eros truth criteria but influenced by essential consciousness informed by logos knowing. Logos knowing is judged by logos truth criteria but influenced by existential consciousness informed by eros knowledge.

2. Each way of knowing is a non-conceptual or conceptual communication between an ego and some aspect of reality. Therefore, all knowledge is finite as a result of having subjective and objective aspects; i.e., the truth of knowledge always is relative to context and to non-absolute truth criteria.

3. Each way of knowing is represented by emotional or rational symbols. In stable knowledge, the symbols lead ego consciousness to a particular awareness of some aspect of reality. In unstable, creative knowledge the symbols lead ego consciousness to a new representation of knowledge.

4. Each way of knowing allows for an unlimited fragmentation producing relatively autonomous specializations; however, philosophy continually creates an integrated vision either within a particular way of knowing or between eros and logos knowing. The integrated vision always is molded by a particular context.

5. Each way of knowing is assumed to stem from awareness events that participate in a stream of consciousness. This consciousness, in turn, flows from and is grounded in the I-Self which transcends all knowing. By this means all knowing is connected to mystical/religious experience of transcendental meaning. Knowledge may be considered secular but connected to these meanings which may be considered sacred.

Education consists of three aspects:

1. Specialized knowing and training.

2. Integration among specialized areas of knowledge.

3. General education which consist of: (1) integration of ideas intuited from eros and logos knowledge. The intuited would supercede rigorous, specialized knowledge. (2) Under the guidance of one or more religious traditions, ideas intuited from eros and logos knowledge would be integrated and directed toward experiencing the I-Self.

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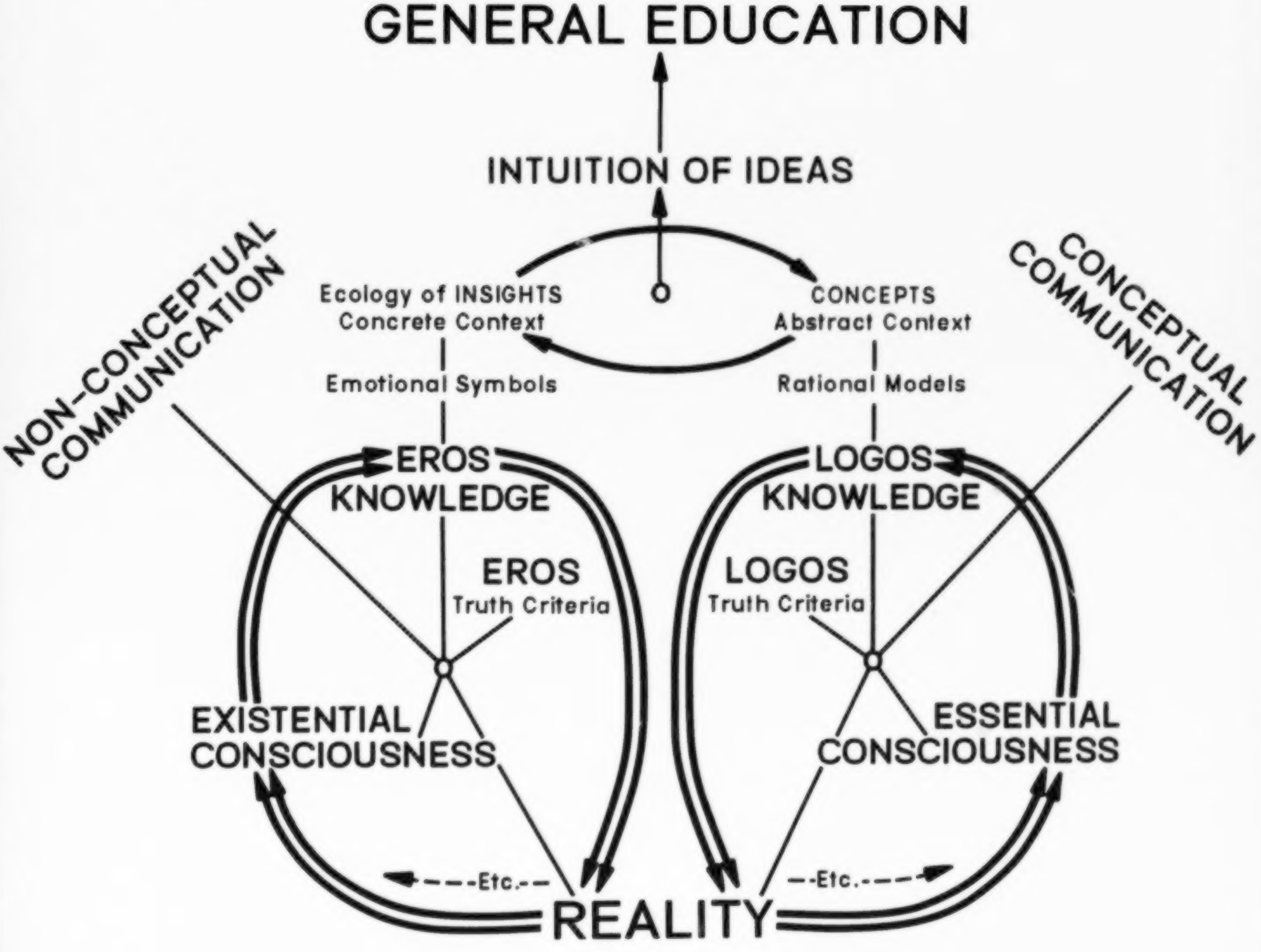
GENERAL EDUCATION
INTUITION OF IDEAS
NON-CONCEPTUAL COMMUNICATION
CONCEPTUAL COMMUNICATION
Ecology of INSIGHTS
Concrete Context
CONCEPTS
Abstract Context
Emotional Symbols
Rational Models
EROS KNOWLEDGE
LOGOS KNOWLEDGE
EROS
Truth Criteria
LOGOS
Truth Criteria
EXISTENTIAL CONSCIOUSNESS
ESSENTIAL CONSCIOUSNESS
---Etc.--
--Etc.---
REALITY

POETRY AND SCIENCE:
TOWARD A POSTMODERN PERSPECTIVE
ON CURRICULA

Steven Carter

For more than a decade, critics have been busily sounding the depths of relationships between quantum physics and postmodern fiction in the works of novelists like Thomas Pynchon, Don Delillo, and Robert Coover, not to mention modernists like Vladimir Nabokov and D. H. Lawrence. It is not unusual today to find undergraduate and graduate courses designed around the themes and techniques of literature and science in modern fiction. By exploring some precise interrelationships between quantum physics and poetry, we can take a step toward melding these individual literature/science courses which are presently limited to one genre into full-fledged interdisciplinary curricula. I offer as models brief discussions of the work of three postmodern (i.e., post-Williams, Crane, and Frost) American poets, Charles Olson, Robert Duncan, and Jack Spicer. The work of each poet respectively demonstrates how the quantum epistemologies of field, wave function, and indeterminacy can be used as interdisciplinary tools of literary analysis in the study of verse.

I

A decade ago Joseph N. Riddell provided a thumbnail sketch of one variety of postmodern poem. For him it is "a field located within known things, like the periodic table of elements, which composes a space housing an unknown disturbance, a dissonance, an undiscovered element that indicates the dynamics of the field" (14). It is likely that Riddell had in mind Charles Olson's earlier prolegomonon to the poetics of open form, the familiar "Projective Verse," in which Olson too defines poetry in terms of

> *Composition by field*, as opposed to inherited line, stanza, over-all form, what is *the 'old' base of the* non-projective.

What Riddell called "dynamics" Olson called

> the *kinetics* of the thing. A poem is energy transferred from where the poet got it (he *will have* some several causations), by way of the poem itself to, all the way over to, the reader. . . . From the moment he ventures into *Field Composition* he puts himself in the open--he can go by no track other than the *one the poem under* hand declares, for itself (*SW*, 16).

Olson's use of the word "kinetics" suggests that he has a specific discipline in mind as a model for his theory of field, or open form. The discipline is physics, or, more accurately, post-Einsteinian physics. In a letter to his friend and publisher, Cid Corman, Olson insists that "the kinetics of contemporary physics [is] more healthful than" (*LO*, 51) the rigidities of either/or, man and world, psyche and cosmos, those separate categories invented by the Greeks. The scientist Neils Bohr seems to agree with Olson that for the contemporary quantum physicist as well, language markers inherited from the Greeks (cause and effect words like "because" and "therefore," for instance, which assume *a priori* a cause-and-effect cosmos) are inappropriate. For Bohr, "When it comes to atoms, the language that must be used is the language of poetry" (Harrison, 123). Contemporary poetry and quantum physics, it would seem, have much to learn from each other.

Perhaps the most fertile epistemological common ground shared by the two disciplines is "the field concept," which, according to the scientist Donna Jean Haraway, "defined developments in dynamic instead of geographical terms. Every aspect of ontogeny had to be viewed in a double light, as the result of 'interactions between the material whole with its field properties on the one hand, and the material parts on the other'" (178). The essence of Haraway's definition is to be found in the phrase "a double light." It is the doubleness of field which creates difficulty in understanding its ambiguities. As the physicist B. K. Ridley has observed, "The total energy of a moving particle, rest-mass plus kinetic, is . . . nothing but the total energy of its own electromagnetic field" (120). To say that a particle is both a particle *and* the field which it "inhabits" makes no sense in classical physics, which, as Charles Olson suggests, is epistemologically less "healthful" for the postmodern poet than quantum physics.

Projectivist verse is a poetry of relationships. As Karl Malkoff has written, "the domain of the Projectivist poem is the point of intersection between inner and outer realities" (66). The Maximus poems, for example, are not discrete, water-tight expressions of Charles Olson's visions of Gloucester, Massachusetts, past and present; they express their meanings only in a focus of relationships with each other.

The epistemology which Malkoff uses to describe Projectivist verse is also used by physicists to define field. A particle is nothing but a focus of relationships between fields. As far as the Maximus poems are concerned, the key feature of field poetics is what I will call quantum paradox, or the non-Aristotelian habit of mind which suggests that reality can be two or more different things at the same time. The physicist Gary Zukav points out that "Quantum field theory is, of course, an outrageous contradiction in terms. A quantum is an indivisible whole. It is a small piece of something, while a field is a whole area of something. A 'quantum field' is the juxtaposition of two irreconcilable concepts. In other words, it is a paradox. It defies our categorical imperative that something be either this or that" (200).

Three fields of action in Maximus create this paradox, defying Aristotelian logic by interacting with each other "instantaneously and at one single point in space instantaneously and locally" (Zukav, 199). I am suggesting that the fields of maximus may be defined as time, space, and the "I" of the poems. The Maximus poems are the intersections of these three fields.

In "Letter 15" from Maximus, a poem which emphasizes the field of time, three things happen. The poem begins with a step backward in time, as the speaker corrects the historical record concerning the fate of a ship called the Putnam. The narrative dramatizes the difficulty of keeping the truth alive through time:

> The whole tale, as we have had it, from his son, goes by the board. The son seems to have got it thirty-five years after the event from a sailor who was with the father on that voyage (to Sumatra, and Ile de France, cargo: shoes). This sailor apparently (he was twenty years older than the captain) was the one who said, that night they did get in, 'Our old man goes ahead as if it was noonday.' He must have been 95 when he added the rest of the tale . . . (71).

The theme of the mutability of memory--and therefore of history--is reinforced elsewhere in Maximus when the speaker declares, "History is the memory of time" (116). This theme in the opening section of "Letter 15" also prefigures the technique of many of the Maximus poems to come. Even as memory is slippery--an old man's reminiscences of a ship in Gloucester--so time itself is slippery. It is Olson's treatment of time as a narrative technique that makes many of the Maximus poems difficult. Sherman Paul elaborates:

> Maximus tells us that his poem will not make us comfortable because it does not follow a linear track to a foreseen destination. In addressing his method, he reminds us of his weaving and of the indivisibility of his concerns--and of his materials, since everything, as with the bird, everything (immediate observation, document, recollection, dream, myth) is the common real material of his poem. In the field there are no boundaries . . . the field he enters is not a subject but the reality he fronts, the place of his attentions. . . . His subject, if he may be said to have one, is man-within-the-field (142).

In short, for Maximus, the field (the "objects" of the poem, and the "I" of the field, the speaker) are one. Maximus: the largesse of a human consciousness expanding, taking in all, becoming all. Olson's man-within-the-field of language recalls Einstein's definition of fields of energy:

> Matter which we perceive is merely nothing but a great concentration of energy in very small regions. We may therefore regard matter as being constituted by the regions of space in which the field is extremely intense. . . . There is no place in this new kind of physics both for the field and matter for the field is the only reality (Capek, 319).

But if field as Einstein defines it here denotes a unity in space, it also denotes a unity in time for Olson. It is this unity which merges theme and technique in "Letter 15" from *Maximus*. The physicist David Bohm observes that

> each local clock of a given level exists in a certain region of space and time [i.e., the field] which is made up of still smaller regions, and so on without limit. We shall see that we can obtain the universality of the quantum of action, h at all levels, if we assume that each of the above sub-regions contains an effective clock of a similar kind, related to the other effective clocks of its level in a similar way, and that this effective clock structure continues indefinitely with the analysis of space and time into subregions (98).

Bohm's thought-experiment with ideal clocks is meant to suggest the universality of the quantum of action: that is, a "truth" about space and time which exists in both micro- and macroscopic reality. Charles Olson's use of time in "Letter 15" and elsewhere in *Maximus*, represents an attempt to devise a quantum of action in language. Olson achieves his quantum of action ("h" in the physical cosmos) by searching out in *Maximus*--in the hearts of men and women who populate the poems--what is common to all times and places, dividing time as he does so into conventional sub-regions (the 17th and 20th centuries, say), and then using these universal human constants ("h" might well stand for "human") to erase the boundaries of the sub-regions, of time altogether, creating a sense of what Bohm simply calls "wholeness."

In Part II of "Letter 15," for example, Maximus leaps from the historical account of the Putnam to a conversation in the present with poet Paul Blackburn, who has accused Maximus/Olson of "twisting" the poem, i.e., beating around the bush, leaving the subject for bizarre tangents. Olson/Maximus agrees with Blackburn, and then replies cryptically, "I sd., Rhapsodia . . ." (72). Olson knew that the word "rhapsodist" comes from *rhaptein*, which means "to sew, to stitch together, and *aidein*, to sing. The poet is a stitcher of songs" (Byrd, 91). The songs of Maximus in part comprise the "tangents" of the poem which Blackburn objects to; and yet the tangents are the poem also; it is Maximus who is singing them, even if they are written by someone else, John Smith, for example. Smith, as a historical personage, is part of the field of the *Maximus* poems. Maximus, the "I" of the poem where intersecting fields of time and space meet, is also the field: is, that is, John Smith:

> The winters cold, the Summers heat
>   alternatively beat
> Upon my bruised sides, that rue
>   because the true
> That no reliefs can ever come
>   But why should I despaire
>   being promised so faire
> That there shall be a day of Dome (74)

Smith's poem is a testament of self: it is another voice in the Greek chorus which *is* Maximus. Thus, historical time for Olson is an illusion. Smith/Maximus' voice is followed by three more heroes in "Letter 15," men who made discoveries not for money or rapacity, but for the adventure of it, for love:

> And for the water-shed, the economics and poetics thereafter?
> Three men,
> coincide:
>   you will find Villon
> in Fra Diavolo,
> Elberthubbardsville,
> N.Y.
>
>   And the prose
> is Raymond's, Boston, or

> Brer Fox,
> Rapallo,
> Quattrocento-by-the-Beach . . . (74-75)

"Brer Fox" in Rapallo is Ezra Pound, a hero of Olson's. The distinctions between men like John Smith and Pound cease in the field of *Maximus*, because both are discoverers, and both refused to sell out their integrity. "Letter 15" ends in a bitter shift to the present time, a wrinkle *in* the field of the poem which is the field as well, thanks to one word. ADVERTISEMENTS forms part of the title of a book by John Smith. In present-day American culture, ADVERTISEMENTS leads to this:

> o Republic, o
> Tell-A-Vision, the best
> is soap. The true troubadors
> are CBS. Melopoeia
>   is for Cokes by Cokes out of
>   Pause
>
>   IV
> (o Po-ets, you
> should getta
> job (75)

Linear time thus dissolves in "Letter 15" in two ways, one positive and one negative. John Smith's "Advertisement" is surely a positive addition to the world of *Maximus*, because of Smith's integrity. But even in Smith's time, the seeds of American corporate venality can be seen, as when the pilgrims choose Miles Standish as navigator over Smith. Maximus dramatizes such self-interest and short-sightedness in the above references both to contemporary advertising and pragmatic American attitudes toward "lazy" poets. Linear time, therefore, has made little difference between Smith's day and our own. On the other hand, the identification of John Smith's integrity with that of Ezra Pound shows that a common ground also exists between men of character, a bond which ironically also withstands the decay of linear time.

II

Like Charles Olson's "Letter 15," Robert Duncan's poem "Spelling," from his 1968 volume *Bending the Bow*, shares a key epistemological assumption with a model drawn from quantum physics: the wave function.

"Spelling" is a poem that performs double duty. It literally dismantles its own sounds and spellings in what first appears to be a dry-as-dust exercise in phonetics: "/k/ examples: *kan*, *kind*, *kreep*, *klime*, *kween*, *skin*, scratch, thikker, brakken, siks, kase, kure, kreem, klame, kwarter, skwire, konker, distinkt, *eksamplz*." These sound-spellings represent more than an academic exercise, however. In fact they constitute what Duncan calls a "dance": ". . . passages in bold face and in Greek letter should be written on a blackboard as they arise in the course of the dance of words and phrasings that is also the earnest mimesis of a classroom exposition, keeping in the motion of the writing as in the sound of the reading the felt beat in which the articulations of the time of the poem dance . . ." (48-49). Duncan's directions for the reading of the poem indicate that "Spelling" is meant to be a performance, not merely a poem to be read. But how does one "read" such a poem? And what is the relationship between the performance and the thing to be performed? Put another way, what is the relationship between form and content in "Spelling"? One usually thinks of the "content" of a dance as the program written and choreographed for the dancer, and thus interpreted by the dancer. "Dance," of course, is a favorite metaphor of poets and physicists alike to describe the relationships between the poet or the physicist--or anyone--to the "system" he is entering, whether it is language or atomic phenomena. Hence W. B. Yeats' famous rhetorical question at the end of "Among School Children,"

> O body swayed to music, O brightening glance
> How can we know the dancer from the dance? (117)

In this case the "dance" is Plato's "ghostly paradigm of things"; the "dancer" is the flesh-and-blood human being that seeks a balance between body and spirit. In physics, the question, "How can we know the dancer from the dance?" is no less perplexing:

> I think it would be misleading to call particles the entities involved in the most primitive events of the theory (quantum topology) because they don't move in space and time, they don't carry mass, they don't have charge, they don't have energy in the usual sense of the word.
>
> QUESTION: So what is it that makes events at that level?
>
> ANSWER: Who are the dancers and who is the dance? They have no attributes other than the dance.
>
> QUESTION: What is 'they?' (Zukav, 317)

In physics, the epistemology of "dancer" and "dance" carries matters to the most fundamental levels of physical existence. As we have seen, one theoretical premise of post-quantum physics is that there is no fundamental break between *any* level of physical existence and the human consciousness that dwells "in," or "of," that existence. When the physicist above asks, "What are 'they?'"--meaning, what *are* the particles if the field which they are "in," or "of," *is the particles too*, as opposed to simply being "made up of" the particles--then he is using his physicist's consciousness to re-define consciousness itself. That is to say, the very concepts *behind* the verbs "are" or "is" are challenged by questions like the one about the nature of dancer and dance.

How does one read self-reflexive poetry? What kind of consciousness does the self-reflexive poem demand? It is my contention that self-reflexive poetics represents another link in the epistemological chain between quantum physics and poetry: that is, the consciousness "demanded" by the self-reflexive poem is precisely the same consciousness "demanded" by a thought experiment in physics which is specifically designed to illustrate the philosophical implications of the wave/particle ambiguity. I refer to Irwin Schrodinger's famous cat experiment.

The physicist Gary Zukav describes Schrodinger's notorious quantum dilemma:

> A cat is placed inside a box. Inside the box is a device which can release a gas, instantly killing the cat. A random event (the radioactive decay of an atom) determines whether the gas is released or not. There is no way of knowing, outside of looking into the box, what happens inside it. The box is sealed and the experiment is activated. A moment later, the gas either has been released or has not been released. The question is, without looking, what has happened inside the box. . . .
>
> According to classical physics, the cat is either dead or it is not dead. All that we have to do is open the box and see which is the case. According to quantum mechanics, the situation is not so simple.
>
> The Cophenhagen Interpretation of quantum mechanics says that the cat *is in a kind of limbo represented by a wave function* [my italics] which contains the possibility that the cat is dead and also the possibility that the cat is alive. When we look in the box, and not before, one of these possibilities actualizes and the other vanishes. This is known as the collapse of the wave function because the hump in the wave function representing the possibility that did not occur, collapses. It is necessary to look into the box before either possibility can occur. Until then, *there is only a wave function* [my italics] (85-86).

The "wave function" is a "set" of possibilities, all of which are "real." Human choice therefore automatically becomes part of the "content" of the thought experiment involving Schrodinger's cat; that is to say, the cat *is both alive and dead at the same time* until the box is opened, a situation which classical physics and philosophy would find absurd.

The cat, of course, represents a particle, which is both wave and particle at the same time, until a physicist "collapses the wave function," and measures it, seeing it as a wave, or seeing it as a particle. The "it" ultimately escapes him. In the Heisenberg Uncertainty Relation, the problematic is identical for position and velocity of particles; the physicist can measure one or the other, but never both at the same time. Thus he can never get "outside" the universe and be "objective" about what he sees. And since his measuring devices, and his consciousness, affect what he observes, he is, as David Bohm and others have long pointed out, part of what he observes.

"Schrodinger's cat" goes beyond the Uncertainty Relation to emphasize the role of choice itself in a universe "made up of" possibility. The cat alive *or* the cat dead, in quantum physics, are not merely two opposing "realities" that may or may not "come true" when the mythical box is opened; rather, Schrodinger's wave function suggests that the cat's fate depends on the observer. As Fred Alan Wolf says,

> What controls the fate of the cat? According to quantum mechanics, *you* do--if you are the one who is to open the cage and discover the cat. At first, you and the cat are quite independent of each other. But as time goes on, two possible . . . editions of the cat appear in the cage; one dead and the other alive. The dead cat edition appears more and more probable as time wears on, while the live cat edition appears increasingly less probable. After one hour, there are two equally likely cat editions present in the cage (190).

In short, the cat "needs" the observer in order for its fate to be actualized. As Zukav says, "We are actualizing the universe. Since we are part of the universe, that makes the universe (and us) self-actualizing" (86) Human choice is therefore part of the fabric of physical reality, as much a part of reality as the colors of the rainbow, leaves on trees, flares on the surface of the sun. In quantum mechanics, choice is not merely a catalyst of possibilities; it is a mechanism that initiates possibilities.

Schrodinger, like Heisenberg and Bohm, is concerned with events at the subatomic level. But one of my concerns in this paper is to try to answer the question, Is there epistemological evidence that a link exists between the way phenomena are observed at the quantum level, and the way phenomena are observed--or read, or created, like poetry--in the world at large? It seems to me that it is precisely the self-reflexive features of Projectivist poetics which suggest that the Schrodinger wave model is as viable a tool to measure language as it is a tool to measure physical phenomena.

"Spelling" is both poem and linguistic analysis-of-itself as poem at the same time; it is not either one or the other, just as Schrodinger's cat is not either alive or dead in the box. Once we "open the box," i.e., once we read the poem, we choose a possibility: a poem-as-message, or poem-as-critique-of-itself-as-message. The other possibilities, like the death or life of Schrodinger's cat, disappear in favor of our choice. The poem depends upon our choice in order to be actualized as what it "is," and it is written with self-actualization in mind. In physics, of course, "choice" means more than simply making a conscious decision; the sky never turns green when we will it to. "Choice" is a subtler matter, a matter of interaction between the deepest levels of human consciousness and phenomena. Why a specific wave function appears and another one vanishes, quantum physics cannot yet tell us. Similarly, when we read a self-reflexive poem, the reason why we "choose" a function--reflection, mirror, or gazer--may elude us. And of course the choices we make may well change our subsequent re-readings of the poem.

All poems, of course, are subject to multiple interpretations; all poems may appear differently to different readers, and to the same readers over time. Self-reflexive poetics, however, consciously, deliberately makes the choices thrust upon the reader part of the content of the poems. They are designed not as poems *per se*, but as wave functions, buzzing hives of possibilities which call into question some of our deepest assumptions about language and the world, and finally ourselves.

III

Both the themes and the techniques of Jack Spicer's poetry are dedicated to the "erasures" (128), as Michael Davidson has written, of accepted ideas and structures which are imposed upon language by Newtonian epistemological systems. Spicer's work challenges, as William V. Spanos observes, "the metaphysical or logocentric forms that have dominated the poetry--and above all the hermeneutics--of the Western literary tradition" (1). I want to suggest that Spicer's poetry and poetics also challenge the hermeneutics of the Western scientific tradition as well, by presenting the reader with linguistic models which are relevant to a quantum not a Newtonian universe.

Readers of Spicer's poetry occasionally encounter Einsteinian cosmology head-on: "Distance, Einstein said, goes around in circles. This/Is the opposite of a party or a social gathering" (CB, 227). Elsewhere, on a grimmer note, Spicer asks his readers to enter "The unstable universe," which "has distance but not much else" (CB, 236). It is a lonely universe mirrored in "The tidal swell" of Stinson Beach, which itself is constituted of "Particle and wave/Wave and particle/Distances" (CB, 227). The appearance of quanta in Spicer's work is not merely thematic; the chiasmus--the speaker crosses over from particle and wave to wave and particle--mirrors of course the way electrons "cross over" from one manifestation, a wave, to another, a particle, depending on how they are observed by physicists. This is elementary quantum physics as expressed by an elementary linguistic device, the chiasmus; but in a poem from the "Morphemics" section of his volume, Language, Spicer adds a complex feature to the equation:

> Lew, you and I know how love and death matter
> Matter as wave and particle--twins
> At the same business (CB, 234).

The syntactical ambiguity between the first and second lines, and the pun on "matter" itself, are doubly significant. The constituents of matter (wave and particle) and the classic constituents of poetry (love and death) form one linguistic system. Wave-and-particle is not a metaphor for love-and-death, nor is love-and-death a metaphor for wave-and-particle. The parallel is clearly thematic (love loses its meaning without death and vice versa; wave cannot exist independently of particle and vice versa), but as "matter/Matter," both systems represent two sides of the same linguistic coin: it is the syntax which erases conventional boundaries between states of energy/matter (wave and particle) and states of being/nonbeing (love and death). For some readers, as Robin Blaser has suggested, such an epistemological doubling does not make "sense":

> For us, outside the strangeness of poetry, discourse has been accepted as an act of language between ourselves, an agreement of logical structure that turns out to be our imposition of an order. This amounts to a closure of language . . . (CB, 291).

Jack Spicer liked to "disturb this agreement," Blaser adds, which readers unwittingly demand between logic and language.

The "quantum poetics" of Spicer's verse is rarely thematic; Spicer clearly is aware of Einsteinian cosmology, as many poets are, and he understands the paradoxes of wave/particle phenomena. But "quantum poetics" means much more than theme or subject matter. It indicates rather a series of epistemological stances, or investigations of language whose method parallels the investigations of subatomic matter by physicists. Quantum poetics shatters language, reducing it to its fundamental constituents; both quantum physics and quantum poetics seek to discover what the medium of investigation itself--the physicist's instruments, the poet's words--is composed of. Heisenberg indeterminacy applies to both physicist and poet: the physicist is a prisoner of matter and the poet is a prisoner of language: neither can get outside of his medium. The physicist cannot "read" the universe perfectly, the poet cannot write the perfect poem. Each, of course, must deal with the consequences of these constraints in different ways.

The physicist knows that Newton's laws of motion which pertain to the macrocosm, or the everyday "commonsensical" world where people throw balls to people and expect them to come down again (subject-verb- object), do not always apply to the world of the quantum. As a linguist, Jack Spicer is keenly aware that language pays a fealty to Newton's everyday cosmos: the laws of language (subject-verb-object) mirror the laws of nature (John throws the ball to Robert). But language may disobey Newtonian laws—in syntax, grammar, metaphor—even as quanta do. Spicer observes that "We make up a different language for poetry/And for the heart—ungrammatical" (CB, 233). Even the "language of the heart"—everyday words and sentences which people speak to each other—fails when we "cannot quite make the sounds of love/The language/Has so misshaped them" (CB, 237).

Quantum poetics and quantum physics share another epistemological feature: both systems are dedicated to tearing down boundaries which the human mind has artificially imposed upon matter and language. Modern physicists even question the boundary between macrocosm and microcosm:

> . . . we maintain that all our macroscopic bodies of classical physics are composed of atoms and elementary particles held together by forces of various kinds. There must therefore exist a boundary where the classical description ceases to have validity and the quantum properties become dominant. Now nobody knows the exact position of the boundary. Most people would agree that the experimental apparatus with which we execute the experiments and the computers with which we evaluate the data are on the classical side, and therefore behave according to the laws of classical physics. But between this input and output there is a system, like the photons . . . which behaves quite differently from any classical system that we know. Thus, by setting a boundary somewhere, on one side of which things are classical and on the other side quantal, we cause almost insoluable problems of fundamental importance.

Thus, for the physicst J. M. Jauch (32-33), the most hallowed boundary of all, the "line" between the Newtonian world of classical mechanics, and the quantum realm, may not exist, at least in a configuration which makes sense to us at present.

Jack Spicer is equally suspicious of the artificial boundaries which are created by human discourse:

> Let us tie the strings on this bit of reality.
> Graphemes. Once wax now plastic, showing the ends. Like a red light.
> One feels or sees limits.
> They are warning graphemes but also meaning graphemes because without the marked ends of the shoelace or the traffic signal one would not know how to tie a shoe or cross a street—which is like making a sentence (CB, 240).

Graphemes, which along with morphemes and phonemes constitute the building blocks of everyday discourse, also inhibit discourse by limiting freedom of expression. "Let them snarl at you," the speaker adds, "and you snarl back at them." The act of snarling is the act of writing the poem which snarls at its own graphemes. "Crossing a street against the light . . . is all right," the speaker goes on. "Freedom in fact." Spicer's radical suspicions of linguistic boundaries even extend to the human imagination itself, and its interrelationships with the Newtonian cosmos which it appears to exist "in." Spicer describes an Orphic stance for the poet-in-the-world:

> . . . from what I've seen . . . there's no question that objective events can be caused in order for poems to be written. Robin [Blaser] in "The Moth Poems" had moths just coming in the wildest places, something where the odds would be about a million to one of the moths being just exactly in the place that he wanted the poems written, but I was there a couple of times when it happened. And I think that it is certainly possible that the objective universe can be affected by the poet. I mean—you recall Orpheus made the trees and stones dance, and so forth—and this is something which is in almost all primitive cultures, and it, I think, has some definite basis to it (VL, 206).

Although Spicer looks back to Greek mythology in suggesting that the poetical imagination and the so-called objective world may not constitute two separate systems, at least one quantum physicist believes that such a reciprocal metasystem may indeed be real. In Wholeness and the Implicate Order, David Bohm theorizes that

> the body enfolds not only the mind but also in some sense the entire material universe . . . both through the senses and through the fact that the constituent atoms of the body are actually structures that are enfolded in principle throughout all space.

Even in commonsensical everyday existence, Bohm points out that reciprocity between the crude categories of "mind" and "matter" is hardly a rare occurrence:

> . . . we know it to be a fact that the physical state can affect the content of consciousness in many ways (the simplest case is that we can become conscious of neural excitations as sensations). Vice versa, we know that the content of consciousness can affect the physical state (e.g., from a conscious intention nerves may be excited, muscles may move, the heartbeat change, along with alterations of glandular activity, blood chemistry, etc. (208-9).

For both the poet Spicer and the physicist Bohm, then, "the psyche," as C. G. Jung has written, "cannot be localized in space or . . . space is relative to the psyche." Jung elaborates:

> Synchronistic phenomena prove the simultaneous occurrence of meaningful equivalences in heterogeneous, causally unrelated processes; in other words, they prove that a content perceived by an observer can, at the same time, be represented by an outside event, without any causal connection (518).

In a whimsical poem from the "Intermissions" section of Language, Spicer suggests that the poet also participates in Jungian acausality:

> Where is the poet? A-keeping the sheep
> A-keeping the celestial movement of the spheres in a long, boring procession
> A-center of gravity
> A-(while the earthquakes of happiness go on inside and outside his body and the stars
> in their courses stop to notice)
> Sleep (CB, 230).

Like William Blake, perhaps, who hated Newtonian cosmology, and who felt that "The stars were in the heavens because man's imagination saw them there" (4), Jack Spicer takes seriously the possibility that the physical universe, and man's perception of it, are not two separate systems.

For David Bohm in a quantum context, and for Jung in a Newtonian one, human beings live in a world of processes, not of watertight distinctions between big and small, self and world, mind and matter. In epistemological harmony with both Bohm and Jung, Jack Spicer seeks to restructure the devices of poetry in order to pay proper fealty in language to such a world.

Charles Olson, Robert Duncan and Jack Spicer are not alone among postmodern poets in their affinities with the epistemologies of quantum physics. The work of major poets like Allen Ginsberg and Robert Creeley, as well as the work of new arrivals like Andrew Joron (Force Fields) John Bricuth (The Heisenberg Variations), and Al Zolynas (The New Physics), suggests that interdisciplinary courses devoted to the study of interconnections between science and fiction could be enriched by the addition of poetry. For both genres continue to reveal literature and science as a matrix, as two separate but complementary colors in the spectrum of postmodern culture.

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THE SYMBOL AT CENTER: INTEGRATING VISUAL ARTS AND FILM IN A HUMANITIES COURSE

Carol Hall

This course grew out of fusion of a pedagogical desire to enhance the teaching of a humanities course which I had been assigned to teach and a more selfish desire to pursue an area of scholarly research which has occupied my attention for more than a decade. The result, as I intend to demonstrate, has been a rather happy marriage of the two aspects of professorial activity which are usually at odds: teaching and scholarship.

The relationship between the visual arts and literature is a subject which has been a matter of speculation and controversy since classical times. Most of what has been written about the subject has been concerned with defining limits and keeping the "sister arts" at a virtuous distance from each other. Scholars interested in recent investigations of the aesthetics of ut pictura poesis will know the exciting work of Hagstrum, Praz, and Paulson, among others.[1] But introducing the sister arts into an undergraduate or general humanities core program is often seen as too difficult a matter to tackle in a one-semester course. Thus most core humanities programs at the undergraduate or community college level are limited to reading and discussion of literary works, often surveyed in chronological order along the lines of great works or world masterpieces. As one who has taught such courses with varying degrees of success for years, I do not count myself among their detractors. But I have always been bothered by the nagging question of what a student really carries from such a course, other than, say, a life-long love of Blake or a life-long dread of Milton.

Experience has shown that too often, in a desire to translate meaning to students, specialists only succeed in intimidating them by the seeming ease with which they can explain what a literary work "means." The motivation in developing this course was to guide the student to his own discovery--to give the student confidence in approaching works of art in general. The ideal would be to promote access to the enjoyment of drama, film, and art by allowing the student to draw upon aesthetic perception which he practices every day in his extra-academic life, but which, for whatever reason, he seldom takes through the doorway of the classroom. Including visual components in the teaching of humanities seems very important now because of the increasing role that things "seen" plays in the dissemination of information and the providing of entertainment.

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My approach to the problem of giving focus to a multimedia course was to teach it from a semiotic perspective: around the central theme of the artistic symbol in its varied manifestations. I chose as subject matter works growing out of the cosmopolitan and conscious "isms" of the turn of the century. This was a time when boundaries between the arts were purposely blurred and genre, media, and form were intermingled. Artists applied themselves with new energy to the limits and uses of the artistic symbol. Artists of the period attempted pictorial and metaphorical representation of problems such as the battle of the sexes, institutions of marriage and family, class struggle, women's rights, and the search for faith in a godless world. Such themes have universal application and are accessible and topical to the population of eighteen to twenty-two-year-olds which constituted my target group. One could say that the multimedia Rock "Video" in its early, "artsier" manifestations has real affinity to the kind of mixed-genres experimentation that had its theoretical base in Wagner's theory of _Gesamtkunstwerk_.

I gave chief consideration to the works of Scandinavian dramatists Henrik Ibsen (1828-1906) and August Strindberg (1849-1912) and the painter and graphic artist Edvard Munch (1863-1944). Among these artists there exists a nice, if not unique, connection: common regional identity as self-exiled Scandinavians, common themes; a knowledge of and a reaction to each other's work. Finally, in an attempt to see the realization of the fusion of the arts that Strindberg experimented with in _A Dream Play_, the films of the great Swedish filmmaker Ingmar Bergman were included. Not only does the film bring us up to the present time, it also provides the most complete marriage of picture and text. This is especially so in the case of Bergman, an exceptionally "literary" filmmaker. He is, in my opinion, the direct heir to Strindberg's theater and his work carries the unmistakable stamp of Strindberg's influence. There are additional ways in which the work of these artists is interrelated: Strindberg painted; Ibsen's first desire was to become a painter; Munch wrote poetry and kept impressionistic journals that may be read as commentary to his art; Munch, Ibsen, and Strindberg all belonged, at one time or another, to the "bohemian group" of Scandinavians seeking to make a name for themselves in Munich; and, finally, Munch painted famous portraits of both Strindberg and Ibsen.

Goals

The goals of this course were:

1. to introduce the student to the art of four outstanding artists whose works span a period from 1866 (Ibsen's _Brand_) to 1979 (Bergman's _Fanny and Alexander_).

2. To explore the manner in which these artists approached their craft through varied media of text, theatrical performance, painting, graphics and film.

3. To explore the use of the artistic symbol: word as symbol; act as symbol; object as symbol.
4. To become acquainted with traditional emblems, leitmotifs, and _topoi_, as they were reinterpreted and applied in the emerging century.
5. To encourage the student to approach a work of art as an artifact that can be examined, manipulated, and viewed from several perspectives.
6. To encourage discussion of topical problems in relation to the works we considered, to relate art to "reality," and to demonstrate the centrality of art to human experience.

Syllabus and Texts

The appended course syllabus provides the schedule of reading, viewing, and class discussion during the semester. Lectures were organized according to the thematic scheme described later in this paper and they alternated with small-group brainstorming sessions on topics provided by the teacher. On reserve in the library were seventeen texts, including Michael Meyer's masterful biographies of Ibsen and Strindberg.[2] The use of these texts was optional and about half of the students made use of them over the course of the semester. Bergman's own autobiography, _Laterna Magica_, was only available to us at that time in a German translation, which one student was able to use and report on.[3] In addition, the film scripts of _The Seventh Seal_, _Wild Strawberries_, and _Fanny and Alexander_ were made available to those students who wished to read them.[4] At this time, only _Fanny and Alexander_ is in print. Students who wanted access to technical information about filmmaking were referred to Monaco's _How to Read a Film_.[5] Likewise, Ivins's old but useful _How Prints Look_ was recommended to students who wanted to learn to distinguish one graphic technique from another.[6] Two basic anthologies were required: Henrik Ibsen: _Four Great Plays_ (Bantam)[7] and _Six Plays of Strindberg_ (Doubleday).[8] The more obscure _Brand_ by Ibsen was circulated among the class members in several copies borrowed from local libraries. The paintings and graphic works of Munch were presented in the form of slides, as will be described below. Two books about Munch were on reserve.[9]

Newsprint and Group Dynamics

I was fortunate to obtain a viewing room in the Media Center of the Undergraduate Library at Howard University for this class. The room was furnished with twenty-five chairs--my largest class consisted of twenty-two students--, an easel and video equipment. There was no blackboard. This forced me to resort to easel and newsprint, which turned out to be a serendipity. I found students were far more attentive to material written in colored markers on the newsprint pad than they usually are to anything that appears on the all-too-familiar blackboard. Key words or phrases written on the newsprint attended each lecture--these sheets were sometimes generated by the teacher, sometimes by the students as a result of group work. These were kept from class to class. Often, students arriving early to class assisted in attaching these papers to the walls of the classroom. These reminders of previous class lectures and discussion served the purpose of reviewing what had gone on before and of serving as a point of reference in later discussions. The sheets were stored in a cardboard holder in the Media Center and students could consult them upon request, which they often did before tests. The novelty of this improvised "system" doubtless had something to do with its efficacy, but the papers proved useful "objects" for the accumulation of vocabulary words and terms that triggered memory and associations. They constituted a record and an accumulating "list" of what we were doing. Such lists were also useful in the composition of exams, as I shall explain in a later section of this paper.

Lecture Organization

Formal lecture sessions were organized semiotically around a central theme, the "key words" were on the easel-pad at the beginning of class. For example:

March 3	*Key Words*
Disease as Metaphor	
Strindberg, *Miss Julie*	plague
Ibsen, *Ghosts*	heredity/sin
Ibsen, *A Doll's House*	syphilis/AIDS
Ibsen, *The Wild Duck*	festering lies
Munch, a series of paintings and engravings on death; "Adolescence"; "The Dying Child"	blindness alcoholism menses/fear of sex
March 31	
Ambiguity of Beauty and Death	
Strindberg, *A Dream Play*	vampire/lamia
Strindberg, *A Ghost Sonata*	*la belle dame sans merci*
Ibsen, *Hedda Gabler*	Salomé/Judith
Bergman, *Winter Light*	Medusa
Munch, series of the "Three Stages of Woman"	misogyny
or "The Sphinx"; vampire series; "Maiden and Death" series	eroticism
Millais, "Ophelia"	*Liebestod*

April 12

The Dance of Death
Strindberg, *The Dance of Death*
Bergman, *The Seventh Seal*
Bergman, *Wild Strawberries*
Munch, a series of paintings and graphic works called "The Dance of Life"; Böcklin, "Isle of the Dead"; "Self-Portrait with Death"

danse macabre
memento mori
Grim Reaper/Time

Viewing of Videos and Slides

The first four video performances were viewed together by teacher and class. Because we met on Tuesdays and Thursdays in a 90-minute class, viewing of performances took all of one period and about a third of another, with time for class discussion on the second day of viewing. Viewing the videos together in the beginning gave a sense of common enjoyment and participation, but it also provided a necessary sense of seriousness and control in what might otherwise seem to the student a passive activity. Later, the students took a responsible and serious attitude about viewing assignments on their own. After the completion of *Hedda Gabler*, which we viewed as a group, students were assigned three Bergman films, which they were able to view alone, or in groups of three at video stations in the Media Center. The Center has long hours during weekdays and is also open on weekends.

The Slide Organization

The slides were organized in six parts. Part I was "An Introduction to the Use of the Artistic Symbol." In this series of five paintings, I lectured in detail about the various ways that an artist might use symbols drawn from literature, tradition, and the viewer's experience of the natural world to "say something." My purpose here was not to intimidate, but to suggest strategies for viewing the rest of the slides which would be presented without interpretative commentary. The paintings contained in Part I were presented with an interpretative title:

1. Allegory, Symbol, and the Grotesque: A Literary Painting.
   Henry Fuseli: "Titania, Bottom and the Fairies" (1793-1794) oil on canvas. (Kunsthaus, Zurich)

2. Experiment with Tradition
   Pierre Puvis de Chavannes: "The Magdalene in the Desert (1869) oil on canvas. (Rijksmuseum Kröller-Müller, Ollerlo, Holland)

3. Detail of 2.

4. Ambivalence of Beauty and Death
   Lucien Lévy-Dhurmer: "The Gust of Wind" (1896) oil on canvas. (Collection Nourhan Manoukian, Paris)

5. Capturing Dream Images in Color and Form
   Arnold Böcklin: "Isle of the Dead" (1880) oil on mahogany. (Museum der bildenden Künste, Leipzig)

6. Literary Figures Assume Separate Identity in Visual Representation
   Sir John Everett Millais: "Ophelia" (1852) oil on canvas. (Tate Gallery, London)

Part II, without commentary, was titled, "Symbolist Images of Women" and consisted of fifteen graphic works by Munch, von Stuck, Klimt, Rops, Delville, Redon, and Khnopff.

Part III, "Images of Man and Woman: The Battle of the Sexes." Seventeen graphics by Munch with one each by Kokoschka and Rodin.

Part IV: "Images of Man in Society," eight graphics by Munch and one by Félicien Rops.

Part V: "Portraits of the Artists and Others," portraits of Strindberg and Ibsen by Munch; self-portraits by Munch, Böcklin, and Gauguin.

Part VI: "Direct Contact Between Art and Drama," three Munch graphics for works of Ibsen and one oil with direct reference to Ibsen's _Ghosts_.

After presentation to the class, this carousel of slides was put on reserve in the Media Center, with accompanying script.

Visualization of Stage Settings: Drawing Descriptions from Text

When we were reading the text of _Hedda Gabler_, I provided the students with a roughly executed sketch of the stage setting as described by Ibsen in the stage directions, one sheet illustration for each act. I did so in the belief that students with little or no experience of live stage performance have to be coaxed into "visualizing" the action that they are reading in a text. I provided the students with markers and asked them to block out or mark important parts of the stage or props in each act. I was preparing them in this exercise for the much more demanding assignment of visualizing Strindberg's setting for the highly symbolic and complicated _A Dream Play_. The results of the _Dream Play_ visualization class were exciting and lively. With almost no hesitation, students were "translating" and interpreting a complicated text to each other in visual form.

Testing and Test Composition

In this nontraditional course it was necessary to come up with a traditional grade. For this reason, testing was done in a usual manner, with all of the ambiguities attendant to conventional testing. The emphasis on improving writing skills at Howard requires an essay format for tests. Two one-hour tests were given in addition to a two-hour final exam. None of this is of particular interest to the subject at hand. The method of composing the exam is, however, worth noting. In the "review sessions" before each test, students were randomly assigned to groups of four or five and asked to come up with from seven to ten essay topics for the exam. Needless to say, the students' attention level is high during this exercise because nothing is dearer to the heart of the student, alas, than "what's going to be on the exam?" They set about this task quite seriously. By this time, they were used to working together and to channeling their competitive drives to the group effort. The result was a list of serious and sound essay topics. There was some duplication in the list of essays which they wrote on newsprint and presented to the other groups. Twenty-seven or so topics were narrowed down by the process of eliminating duplication to about fifteen. Then by another process of discussion and debate, the students agreed on the final list of ten topics. They knew that the exam would be based on discussion of these topics, even though the questions would be reworded and, in some cases, telescoped. I have often used this technique in literature courses. It affords a way of reviewing in which the teacher plays no initiative role and which allows serious students to approach the exam with confidence and welcome the challenge they have created for themselves.

Final Assessment

I stated at the beginning of this paper that I was often bothered by the question of what a student takes from a course. Although it is almost impossible to measure this in any conclusive way, I feel that the approach I have described here is at least moving in the right direction. The class came together as a group very quickly and there was a common feeling on the part of the students and the teacher that we were working together in our investigation of these fascinating and problematic works of art. One evidence of this surfaced in the fall semester of 1987, when I entered the classroom to begin showing the second half of Bergman's gloomy journey into personal despair, *Winter Light*. More than a few students voiced the opinion that this was the "most boring" movie they had ever seen. After the last fifteen minutes of the film had been shown a lively small-group discussion session ensued that was so heated that I had to shut the door to the classroom. The class ran overtime as students debated the "posture of the crucifixion" and its meaning to Bergman and the metaphorical use of skin disease in the characterization of the long-suffering female protagonist. It would be foolish to suggest that the students emerged from this course as accomplished drama, film, or art critics; just as it would be absurd to claim that a student who sat through "Introduction to Shakespeare" is a Renaissance scholar. Students indicated in their evaluation of the course that the "different" classroom format made the course more interesting. The participation level was far higher than I have come to expect in "straight lecture" courses. I am sure that the "critical vocabulary" of the students was increased as well as their awareness of the impact of the uses of allegory, metaphor, and emblem as it bombards them daily in the form of information, advertising and entertainment. They were exposed to a considerable degree to the work of outstanding Scandinavian artists during the age of their greatest influence on European culture. And finally, but not least importantly, they were exposed to and became comfortable with, hearing a foreign language and appreciating that a message does not have to be voiced in their own idiom to be relevant to their lives.

Endnotes

[1] Jean Hagstrum, The Sister Arts: The Tradition of Literary Pictorialism and English Poetry from Dryden to Grey (Chicago: University of Chicago Press, 1958); Mario Praz, Mnemosyne: The Parallel Between Literature and the Visual Arts (Princeton: Princeton University Press, 1970); Ronald Paulson, Book and Painting: Shakespeare, Milton and the Bible: Literary Texts and the Emergence of English Painting (Knoxville: University of Tennessee Press, 1982).

[2] Michael Meyer, Ibsen: A Biography (New York: Doubleday & Company, 1971); Strindberg: A Biography (New York: Random House, 1985).

[3] Ingmar Bergman, Mein Leben, tr. Hans-Joachim Maass (Hamburg: Hoffmann und Campe, 1987).

[4] Ingmar Bergman, Four Screenplays (New York: Ungar, 1960); Fanny and Alexander (New York: Pantheon, 1982); Wild Strawberries (London: Lorrimer, 1960).

[5] James Monaco, How to Read a Film (New York: Oxford University Press, 1981).

[6] William Ivins, How Prints Look: Photographs with a Commentary (Boston: Beacon Press, 1969) since reprinted.

[7] Henrik Ibsen, Four Great Plays by Henrik Ibsen (New York: Bantam Books, 1983).

[8] August Strindberg, Six Plays of Strindberg in New Translations by Elizabeth Sprigge (Garden City, NY: Doubleday & Company, Inc., 1955).

[9] Arne Eggum, Edvard Munch (New York: Crown Publishers, Inc., 1984); Thomas M. Messler, Munch (New York: Harry N. Abrams, Inc., 1985).

Syllabus

SCANDINAVIAN FILM AND DRAMA
011-112-01
Media Center UG Library
room 141 T-Th 12:40-2:00

Spring 1988
Dr. Carol Hall

This course provides an introduction to outstanding creative works produced by Swedish and Norwegian artists of the nineteenth and twentieth centuries. Chief consideratin will be given to the dramatists Henrik Ibsen (Norway, 1828-1906), August Strindberg (Sweden, 1849-1912), and the contemporary Swedish filmmaker, Ingmar Bergman (1918-). In addition, we will study the graphic works, paintings, and writings of the Norwegian artist Edvard Munch (1863-1944). Munch knew Ibsen and Strindberg and painted them both. Both Ibsen and Strindberg had serious ambitions as painters in addition to their literary pursuits. Bergman consciously works to continue the rich tradition left by the Scandinavian theater in unique films that have made him one of the most influential directors of the twentieth century.

Thus the material of this course is held together by artistic continuity, mutual influences and common themes. We will be exploring the requirements of the various genres and the media in which they are presented. We will be studying some of the most exciting artistic movements of the turn of the century: realism, naturalism, impressionism, expressionism, symbolism.

Throughout the semester, we will be reading plays, viewing filmed stage performances and original screen plays, and studying art works to consider their relation one to the other and to the age and cultural climate from which they sprang.

There will be two hourly exams and one two-hour final. On nonviewing days, classes will be held in lecture format, reinforced by active participation of students, individually and in group discussions. Discussion groups will be graded. Occasional quizzes will be given. The final grade consists of two test components, plus the average of the daily grade:

average of hourly tests
final exam grade
average of daily grades

READING/VIEWING SCHEDULE:

DATE	TEXT/FILM/SLIDES
Jan 19	*Brand*: a play intended for reading
21	*Brand*: class discussion
26	*A Doll's House*: video (live performance)
28	*A Doll's House*: class discussion
Feb. 2	*Ghosts*: text: lecture
4	*The Wild Duck*: text: lecture
9	*The Wild Duck*: video: class discussion
11	*The Wild Duck* and REVIEW
16	FIRST HOURLY EXAM
18	*Miss Julie*: text: lecture
23	*Miss Julie*: video
25	*Miss Julie*: video: class discussion
Mar. 1	*The Father*: text: class discussion
3	*The Father*: lecture
8	*Hedda Gabler*: video
10	*Hedda Gabler*: video
15	*Hedda Gabler*: class discussion
17	Edvard Munch: slides and discussion
22	Munch, Expressionism/*A Dream Play*, lecture

March 24-29 Spring Break - Read *A Dream Play*

DATE	TEXT/FILM/SLIDES
31	Böcklin: symbolism/*The Ghost Sonata*: lecture
Apr. 5	REVIEW: discussion
7	SECOND HOURLY EXAM
12	*The Dance of Death*: metaphor and *topos*: lecture
14	*The Seventh Seal* (viewed independently): lecture
19	*The Seventh Seal*: discussion
21	*Winter Light* (viewed independently): lecture
26	*Wild Strawberries* (viewed independently): discussion
28	*Wild Strawberries*: discussion and review

FINAL EXAMINATION
Friday, May 6, 12 noon to 2:00

ENHANCING INTERDISCIPLINARY STUDIES IN THE HEALTH SCIENCES

Clare Houseman, Ph.D., R.N., C.S.

Today, more than ever, health care settings are complex multidisciplinary systems. The disciplines within these systems are extremely interdependent in reality, but often the people within these disciplines are more competitive than collaborative (Lynch, 1984). The fractionalization of health care that results from this lack of collaboration on the part of these disciplines is detrimental to the patient, the professionals and the organization. Connelly (1978) describes the root of these problems as resting in health science educational programs with their rising levels of within-discipline isolationism. Garner (1986) reechoes this claim indicating that students learn inter-disciplinary competition from their professors who traditionally have emphasized the uniqueness and specialness of their knowledge base to vie for attention and funding in the competitive university community. In order for future health professionals to maximize their potential for working efficiently and effectively together, university faculty must reverse this traditional competitive isolationism in order that students might learn cooperation with and respect for other disciplines at the earliest point possible in their academic career. A number of authors view interdisciplinary educational experiences as the best means of accomplishing this task.

Interdisciplinary programs in the health sciences are not new. Since the mid-60's monies for interdisciplinary education efforts have been funded by a variety of public and private agencies. These efforts ranged from short term experiences and workshops, to institutionalized programs, to concerted efforts in programs across the country. To give some idea of the range of interdisciplinary programs some examples will be provided. Laatsch (1982) details a two session lab in

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which dental hygiene students became more aware of the complexities and knowledge involved in the work of medical technologists. Connelly (1975) described the Kentucky January program which was developed to enable allied health care students to see real world interdisciplinary approaches in action. Atwood (1978) implemented a 6 week summer institute to enhance interdisciplinary relationships and teaching skills of health occupations instructors.

Douglas (1982) describes an interdisciplinary masters program implemented at the University of Connecticut which involves course work in clinical dietetics, medical technology and physical therapy with a core of courses germane to all health professions. Finally, Brightly (1986) details a 3 year interdisciplinary health program for handicapped children which spanned three universities in cities across the country.

These programs were successful, but such efforts have not significantly impacted upon most programs which continue to teach along traditional isolated disciplinary lines. Barriers to interdisciplinary programs are significant and have been identified by several authors. First, accreditation for undergraduate programs within the health professions are extremely rigid and don't allow for much interdisciplinary work (Brightly, 1986). Secondly, change threatens the status quo, and turf issues arise (Garner, 1986). Third, there appear to be fears of domination of one discipline over another (Jacobsen, 1977). Fourth, there is a lack of positive image for the concept and misunderstanding of the philosophy (Jacobsen, 1977) and finally, the programs do not go along with traditional university disciplinary lines and funding sources, making them much harder to institutionalize.

Nevertheless, because of the considerable advantages to faculty students and health consumers expected to accrue from the implementation of interdisciplinary programming in the health sciences, efforts continue. This paper will outline some that have been made at Old Dominion University in the college of Health Sciences.

Attempts to institute interdisciplinary changes began in the early 80's. The first sought to conserve faculty resources by combining graduate research courses across disciplines. The rationale given was that essentially the research process was the same no matter what the discipline, and that there was a great deal of duplication of effort when faculty members in five different disciplines taught similar courses to three or four students a piece. The idea and rationale were both excellent, plus students in the course would learn more about each others' disciplinary perspective. The effort was stymied by faculty resistance to the concept due primarily to turf issues and lack of support for the interdisciplinary philosophy. According to Heinze's (1986) terminology, this would represent a "top down" approach; i.e. an administrative push. The lack of "bottom up" or grass roots momentum amongst the representatives from each department, however, was a barrier to implementation. The best explanation for lack of willingness to negotiate this course work would probably be concern regarding loss of territory and fear that other departments would gain power if such compromises were made.

In March of 1987, the dean of the newly designated College of Health Sciences at Old Dominion University, Dr. Lindsay Rettie, decided to implement a Ph.D. program within the College. For a variety of reasons, it was decided to place this program outside the ongoing departmental structure of the College. This decision resulted in some challenges as Connelly (1978) has suggested in regard to obtaining traditional university resources like library funding, scheduling, etc. However, it removed the doctoral program to some extent from the usual interdepartmental jockeying for turf and resources. The program provides an institutionalized interdisciplinary focus within the College, because the program must depend on teaching faculty from all of the departments to survive. In exchange, doctorally prepared faculty have the opportunity to work with doctoral students and experience the enhanced prestige of teaching courses at the advanced graduate level.

The doctoral students who graduate from the College of Health Sciences will no doubt be better prepared to practice, teach and administrate in the multidisciplinary clinical arena, than previous generations of students have been. The fact that the program resides within the University wide Urban Services program means that the student will take at least three core courses with students in the Education and Business and Public Administration Colleges. These courses are designed to help leaders in all these fields to assess urban populations for needed services, and plan, study resources for, implement and evaluate these services.

The College of Health Sciences decided that since the health services truly need doctorally prepared scientists, that the preparation of all students as researchers would be imperative. A series of four required research and theory courses were mandated for all students. The other four courses within the Health Services Concentration Area are elective and can be selected from a variety of choices, including Health and Jurisprudence, Policy and Politics of Health, Ethics for the Health Professional, etc. The program also requires a four course cognate which allows the student to select an organized individualized program of course work outside of the Concentration, so that students interested in teaching might go to the Education College, students interested in administration might select a series from the Business College, and students interested in practice might select course work from psychology, physiology, or even transfer in appropriate coursework from other Universities.

Toward the end of the coursework, there is an internship in which the student is encouraged to put into practice ideas and methods learned in the program. A course to help students prepare dissertation proposals is taught across the Education, Business and Health Services Areas. Finally, the student has experienced a variety of faculty across a multitude of Schools and Colleges from which to select a dissertation committee.

The program has attracted students with masters from Nursing, Health Administration, Medical Records, Medical Technology, Nutrition, Physical Therapy and Community Health. It has also enrolled some faculty from the College of Health Sciences who themselves are, through their choice of a doctoral program, making a commitment to an interdisciplinary perspective. The initial Health Science course has 8 students who are looking at theory in the health sciences and sharing concepts and theories from their own disciplines. Students often reflect on areas of mutual interest and similarity between ideas expressed. Comments have also been made regarding the isolation that the lack of a common vocabulary provides. Through their experiences in coursework in the program, it is hoped that this interdisciplinary perspective can be passed on to future generations of students whom our graduates will teach.

But an interesting thing is also happening in the present. At a time when the first interdisciplinary course had yet to be taught, faculty, some of whom were the same persons who had balked at the prospect of instituting the interdisciplinary research course, were now stating that interdisciplinary cooperation should be one of the new college's goals. When the suggestion was made to look at an interdisciplinary course to teach administration to graduate students in the health professions, several departments expressed an interest in pooling resources. While all of the finer points have yet to be worked out, this is felt to be a workable idea and a committee is laboriously negotiating content areas.

Some of the original stumbling blocks no longer seem to be as large an issue. Through the implementation of the doctoral program, an institution exists outside of departmental rivalries that each of the departments can partially own and to which they can therefore feel comfortable contributing. Through establishing the original courses for the doctoral program, a variety of turf issues were worked through. For example, if the course is taught by Community Health, the course is cross listed as Community Health and Health Sciences. If Nursing teaches the course it is cross listed as Nursing and Health Sciences. Advanced Nursing Masters students will register for the course in nursing. Doctoral students will register for the course in Health Sciences. Each program keeps their own students and each program owns the course. when reservations regarding this turf issue came up in discussing the masters' level interdisciplinary administration course, it could be easily resolved in the same manner. There may be other barriers which are not so easy to transcend, but at least there is a belief that it can be done and if it is, that it will payoff in improved student experiences and increased faculty time to do other things.

Perhaps the moral of the story is that a "top down" approach is effective, but it has to involve doing and not discussing. Clearly the implementation of the interdisciplinary doctoral program has had a catalytic action within the College of Health Science. The second conclusion might be that grass roots support is obtainable once faculty realize that the interdisciplinary strategy being introduced will not infringe on their turf, but will as Garner (1986) has put it: "enhance rather than threaten the existing structure" (p.14).

References

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DESIGNING A COURSE IN 'THE HISTORY OF DESIGN'

Michel Oren

To teach a course in the history of design is to open a window first of all on the history of the crafts specialties--weaving, ceramics, wood and metal working--as they were overtaken by successive phases of the industrial revolution. Crafts objects have always been "designed" in the sense that someone found a form that was more or less appropriate to their materials and functions, but Wedgwood in the late 18th century was perhaps the first to split up the labor process sufficiently so as to require "designers" (he called them "modellers") to coordinate it and at the same time to mediate between the requirements of production and those of consumption. Thus the "history of design" appears to be a little over 200 years old and, since the designers for Wedgwood's ceramic ware were mostly freelance artists, to have involved from the start a process of reintegrating artists into production processes that they had been separating themselves from since the Renaissance. For it was at that time, it will be recalled, that artists such as Leonardo and Michelangelo claimed for practitioners of "fine arts" the prerogatives and prestige enjoyed by poets and tried to raise them above the mass of other artisans. The attempt to reverse this process, to bring together again the "fine" and "applied" or "decorative" arts, led the reformer William Morris in the late 19th century to step back into the medieval past of craft production at the same time that he marched toward the socialist future. The history of design from very early on is marked by ambivalent responses to industrialization and modernization.

This seemed a conceptually adequate starting point from which to design an undergraduate course in the history of design for a state university art school of 600-700 students, some studying "fine" arts like painting or sculpture and others majoring in weaving, ceramics, wood or metal work, graphic or environmental design. Art history, my own field, is a service department to these studio areas and mediates between them. Our course would have secondary goals of making earlier design sources available for studio production, and of supporting programs in the "applied" arts. Some faculty in these programs had considerable expertise and could be counted on to enrich the course through an occasional guest lecture.

It was clear that a course in the history of design would involve some interdisciplinary combination of art history, economic history, and the sociology of art. It was clear too that the course could be built around a narrative of attempts to solve a series of problems, not the least of which was the tendency of the narrative itself to disintegrate, to move on inconclusively without closure or resolution of the problems, which later reappeared in other contexts. The history of 20th century painting and sculpture had its own narrative which had been constructed for it more than 50 years earlier by Alfred Barr of the Museum of Modern Art; he had diagrammed it as a genealogical tree so as to make clear which modern movements succeeded which others, and in which order. But the history of design was still too

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new to have agreed on a single story of how it came to be. Apparently there were not yet many such courses being offered in the country. Two colleagues who had been offering them, Victor Margolin and Philip Meggs, were immeasurably kind in supplying syllabi, bibliographies, and letters of advice;[1] the latter went so far as to offer slide duplicates of the illustrations in his book, A History of Graphic Design. My school was unfortunately not able to find a budget for these slides, despite their very reasonable cost, which as it turned out meant that inadequate weight was given to graphics. It is important to try to integrate graphic design into such a course, particularly since some contemporary design consultancies have started with graphics and from there gone into other design functions such as packaging, exhibit design, model-making and prototyping, market research and ergonomic studies. We did not do much with fashion design, either, and as for architecture--important since most early designers were architects and some designed furniture to match their buildings--we arbitrarily excluded it since an architecture course was already offered in the department.

There were basically two kinds of books on the bibliographies supplied by the colleagues mentioned above: Those dealing with reform movements in the traditional crafts areas--the Arts and Crafts movement, Art Nouveau, Art Deco: and those dealing with the industrial design of newly invented objects--electric lights, typewriters, food blenders--which had no tradition at all. Apart from Art Deco having affected the design of some '30s plastic radios, these two areas have been kept quite apart, and authors in one area do not acknowledge the interest or even existence of the other. A notable exception is the British design historian Penny Sparke, two of whose books we used as texts.[2] In general, an allegiance to Arts and Crafts ideals plus conservative industries and consumers have inhibited Britain from producing much noteworthy design in this century; but in design history and design education that country has been pre-eminent.

In fact the narrative I constructed for the course explains that one problem in the 19th century was to improve design by bringing artists and industrialists together. The British mostly failed in that respect but the Germans through their Werkbund were successful. First we take up Morris' textiles and his chairs, De Morgan's tiles, the textiles and furniture of Voysey and Mackmurdo, Ashbee's silver and Gimson's wood designs. We cross to America, to Stickley and Frank Lloyd Wright, to the Rookwood and Newcomb potteries. Arts and Crafts furniture makes it to America but not the textiles--why is that? Tiffany is a problem--is he Arts and Crafts or Art Nouveau? He starts early, but his connections with Bing in Paris seem to indicate the latter. Same for Liberty: he starts early, but Knox's metal designs look very Nouveau. There is some discussion about whether Art Nouveau is all surface or has some structure besides. Quite plainly the flamboyant Nancy furniture is picking up on French rococo. Are these movements pendulum swings that continue earlier alternating trends in painting? There are some connections between Mackintosh and Vienna, Baillie Scott and Ashbee and Darmstadt in different combinations that are not all clear, especially since Baillie Scott beats out Mackintosh in a Vienna design competition and Olbricht then moves from Vienna to Darmstadt. The slides of Mackintosh and the early Wiener Werkstäate make a big impression on the students. So does a trip to the Virginia Museum of Fine Arts, where the 20th century curator, Frederick Brandt, not only gives us a detailed tour of the stupendous Lewis Collection of Art Nouveau and Art Deco objects but takes us through the museum's design storage facilities.

With the Werkbund we come to an ideological pressure group without a directly connected body of design work. Hence, for the students, a puzzling absence of slides. The 1914 debate between Van de Velde and Muthesius--the designer as romantic individualist vs. the designer of prototypes for mass production--seems to strike fire, but it is not entirely clear what Muthesius means by furniture "type-forms." He has picked up this term from Riemerschmidt, who has somehow got it from Grand Rapids, Michigan, center of the U.S. furniture industry, but there are no book illustrations. Evidently these are interchangeable parts which the manufacturer--and perhaps even the customer, in taking apart and reassembling at will--can equally well fit into a table or a chair. Such gaps in our understanding give the course a certain tentativeness, like a jig-saw puzzle with missing pieces. It is not clear to us whether Muthesius was ever clear-sighted enough to work out all the bugs in his ideological position.

When we come to the Bauhaus, it turns out to be an all-time grand stew of incompatible ideologies. Of course the composition of this stew changes as Itten departs and Moholy-Nagy comes on board, the school moves to Dessau, and Gropius resigns as director in 1928. Gillian Naylor's The Bauhaus Reassessed seems the best single text for pointing out these contradictions, despite her jaundiced view of the pretensions of utopian design reform.[3] The painters Kandinsky and Klee are brought in to teach form, notwithstanding that the forms that can be produced by industrial machines have constraints unrelated to those of the fine arts. Individual expression is encouraged, with the expectation that it will ultimately be subsumed in a social ideal. The metals workshop is successful in producing anonymous-looking lamp prototypes for industry, but Marianne Brandt's work in the process loses its craft-based aura and suffers a "loss of artistry." On the other hand, the weaving workshop is also successful in working for industry but Gunta Stölzl insists on retaining hand-looms and tapestry weaving because they encourage innovation and experiment. When Hannes Meyer takes over as director, the Bauhaus becomes more consistent ideologically but most of the interesting people leave. Can it be that it is just this ideological tension and confusion that spawns the innovative profusion of Bauhaus work?

It is not clear to us whether Art Deco is a popularization of the rigid Bauhaus geometries or whether Bauhaus is just a particularly rigid kind of Deco. Of course most Deco is non-ideological, but one might not always be able to guess that from the work. Deco is like an amoeba with numerous pseudopods: There is the original French Deco of the 1925 exposition, elegant with its exotic woods, shagreen and laquer; the American Deco which flowers on the elevator doors of skyscrapers, and in a heroic figurative mode in reliefs on WPA buildings; the Deco in '30s movie houses and of West Coast Mayan Revival; the Deco that has trickled down from high-priced one-off objects for the rich to the mass production of ceramic dinner ware and plastic radios. There is also streamlining, which qualifies either as late Deco, with which it is certainly sometimes combined, or as counter-movement, biomorphic in its shapes and generated from aerodynamics. If it is a counter-movement, then perhaps it continues in Olivetti's 'Lexicon 80' typewriter, the Vespa scooter, and other bulbous examples of postwar Italian design. Penny Sparke asserts this continuity. In America, streamlining is associated with the first superstar consultant designers, Loewy, Teague, and Bel Geddes. The flamboyant style of their operations does not survive the war.

In postwar Germany the rational, functional impulse in design was continued by the Bauhaus' successor, the Ulm School which however soon dispensed with the fine arts department and workshop practices inherited from the Bauhaus and substituted for them mathematics and mathematical logic as the conceptual basis of the design method. The British Pop critics ridiculed the rigors of this method, which they thought ignored the realities of consumption and was inappropriate to products intended to be transient or obsolescent. These critics preferred the vulgar suggestions of sex and power in Detroit automotive styling, which they considered a kind of vernacular or popular folk art. Meanwhile Scandinavian Modern had come to signify as aesthetic centered on wood, modernistic and austere, yet human and even sensuous at the same time. In America furniture designed by a group associated with the Cranbrook Academy of Art became widespread. These were movements of the '50s. In countries such as Germany and Italy, designers had achieved respectable and influential positions in some sectors of industrial production.

The student revolts in Paris and elsewhere of 1968 prompted designers to do some soul-searching on account of this very success. Some felt that they had colluded with the worst effects of capitalist merchandising without having tried to exert a corrective influence. In 1971 Victor Papanek's Design for the Real World accused designers of concocting products people did not really need and urged them to develop greater moral and social responsibility. Some designers returned to craft techniques, set up workshops capable of only small production runs, and became part of what has become known as the Craft Revival. Others turned to designing for handicapped or Third World people. In Italy, in an effort parallel to Conceptual Art and known as "Anti-Design" or "Radical Design," designers organized themselves in groups and began to plan visionary cities, with visionary clothing and living arrangements. Design had come full circle back to the utopian reforming impulses of William Morris. With the disintegration of these Italian groups in the early '70s, two "postmodern" design studios--Studio Alchymia and Memphis--were set up in Milan to function as middlemen between consumers and designers, who thus retained strong control over their products. These studios may in fact represent a second phase of Radical Design.

This narrative which I have constructed for the course leaves out important chunks of design history and also exhibits a bit more closure than the developments in question, particularly the contemporary ones, actually warrant. This was done for pedagogical reasons, since the contours of these developments, even where the crucial pieces are in place, appear complex and scattered on initial contact. It is a narrative which assigns to reformist impulses in design the role of reappearing periodically and ineffectually. The class was made up of one-third painting and sculpture majors, one-third majors in communications arts, and one-third majors in environmental design--in other words, two-thirds were heading for design careers of some sort. Perhaps it was enough to make them aware of utopian and altruistic traditions in their field, and of predecessors who had dropped out rather than continue to design without idealism.

Notes

1. Victor Margolin is professor at the School of Art and Design, University of Illinois at Chicago, and editor of Design Issues. Philip Meggs is chairman of Communication Arts and Design at Virginia Commonwealth University. As Professor Margolin wrote me, "The field as it is now constituted is too loose and agreement on a set of significant issues is lacking. At the moment there is a kind of anarchy or self-determination where everyone defines design history as he or she likes and constructs courses accordingly."

2. Penny Sparke, An Introduction to Design and Culture in the Twentieth Century (New York: Harper & Row, 1987. Penny Sparke, Felice Hodges, Anne Stone, Emma Dent Coad, Design Source Book (Secaucus, NJ: Chartwell Books, 1986).

3. Gillian Naylor, The Bauhaus Reassessed, Sources and Design Theory (New York: Dutton, 1985).

INTEGRATING BIOLOGY AND LITERATURE WHILE MAINTAINING THE INTEGRITY OF THE DISCIPLINES

Frank P. Riga and Kenneth R. Barker

When we began teaching literature and biology in the same course, we discovered a number of problems that appear endemic in such courses. Among these was the difficulty of maintaining the integrity of each of the disciplines while attempting the larger, interdisciplinary perspective that neither, by itself, could provide. We found a tendency to make short shrift of one discipline in favor of the other or to lump both into a kind of social-intellectual history. In either case, we suspected, the student could leave the course without an authentic experience in either literature or biology, or both. We had no quarrel with social-intellectual history, for we have used it to some extent in our course; nor, if the instructors so proposed, did we have a quarrel with those courses that subordinate one of the disciplines to the other, since, in various units of our course, we have fallen into that unequal distribution. Ideally, however, we wanted to create a course, taught by a specialist in literature and a specialist in biology, that would give the student an authentic experience in each of the disciplines without sacrificing either the larger perspective possible in interdisciplinary study or the engagement on two levels of the intellectual issues involved. The end result, however, was not quite a synthesis of the two disciplines, but, more precisely, a dialectic in which each discipline tested the limitations of the other. To define and illustrate the nature of this dialectic, we have chosen two extended, contrasting examples, building our principal discussion on Emile Zola's essay, "The Experimental Novel" (1880), and Herman Melville's novel, Benito Cereno (1855).

Before taking up the examples, we wish briefly to suggest the general character of the course and its aims. From the different perspectives of biology and literature, this undergraduate course attempts to explore several aspects of the human condition, particularly the impact that modern discoveries in biology have had on man's conception of himself and his education. By paying special attention

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to the Nineteenth Century, it centers this dual examination on a period when discoveries in biology revolutionized not only the science of biology itself, but influenced almost every area of human concern, not the least of which was literature. Darwin's discoveries led to the Arnold-Huxley debate in England and to a continuing controversy between the sciences and the humanities. Educationally, the controversy has taken the form of a dialectic, and the peculiar nature of our course allows us to engage the dialectic from both sides. By teaching biology and the literature simultaneously, we hope to achieve, in the student's understanding of the topics presented, an effect which the teaching of each discipline separately would be incapable of.

In this course, undergraduate majors in the humanities are introduced to the content and methodology of biology, and at the same time, undergraduate majors in science are introduced to the aesthetic dimension of human experience in literature. The student's understanding of the process by which scientific judgments are made is fostered by a close analysis of the primary texts of such important scientists as Charles Lyell, Charles Darwin, and Gregor Mendel. Close analysis requires the instructor to "work through" the texts in a kind of post-mortem demonstration, making sure that students see, not only the obvious surface meanings of the hypotheses and data, but also how the scientist arrived at those particular conclusions. In these readings, the student becomes familiar with several important biological principles. Among these are evolution through natural selection, the most important, unifying concept in biology, and genetics, including a demonstration to show how the theory of Lamarck was ousted by the work of Mendel. Since the primary works read in science show how conclusions are drawn from data, the student should develop an understanding, if not of the scientific method, at least of the scientific reasoning used by some of the most creative scientists of the Nineteenth Century.

The student is also introduced to the content and form of literature by a close examination of a number of primary texts. Through the study of these texts, he will examine how the content of literature relates to its form and technique, and thus how the interpretation of literature grows out of an understanding of its formal properties. The literature was chosen because of its intrinsic merit as literature, but also because of its pertinence to the problems and concerns raised by the scientific context. Since the literature we study includes several essays, we have always felt that the scientific texts, especially those of Darwin and Mendel, are significant pieces of literature. By demonstrating the process of scientific reasoning in them, we have wanted to suggest, in a sense, another mode of literary criticism (on a parallel, say, with psychoanalytic literary criticism). Many novels from literary naturalism illustrate how biology manifests itself in fiction, but we have been reluctant to select from such texts exclusively.

Our first long example illustrates the reasons why we have been reluctant to select large numbers of texts from the corpus of literary naturalism. On first blush, Emile Zola's essay, "The Experimental Novel," seems a providential blueprint for those wishing to teach literature and biology in the same course. The essay has all of the earmarks of the era, and it proposes a fusion of science and literature. As Zola insists in the first paragraph, and thereafter, "The return to nature, the naturalistic evolution which marks the century, drives little by little all the manifestation of human intelligence into the same scientific path." The novelist, too, must join in this march of scientific progress, especially as the method for such an effort is already at hand. The experimental novelist, Zola claims, need merely adapt the experimental method that "has been established with strength and marvelous clearness by Claude Bernard in his *Introduction a l'Etude de la Medecine Experimentale*," and by substituting the word *novelist* for the word *doctor* in Bernard's work, Zola proposes to give his own argument "the rigidity of a scientific truth." In keeping with this scientific attitude, then, "the experimental method in letters, as in the sciences, is the way to explain the natural phenomena, both individual and social, of which metaphysics, until now, has given only irrational and supernatural explanations."

These programmatic assertions are argued with great energy and ingenuity, and on the surface, they suggest the outline and reading list for a course in literature and biology. If the naturalistic novel, in fact, carries out the experimental method in fiction, and if that fiction is, in fact, "but a question of degree in the same path which runs from chemistry to physiology, then from physiology to anthropology and to sociology," and if, in fact, "A like determinism will govern the stones of the roadway and the brain of man," then instructors in courses such as ours would indeed be ill-advised to look further for a better set of ideas to provide method and unity for the course. But what Zola gives us, finally, is not science, but something like science as a metaphor, or at best, science as correspondence. Zola himself is uncomfortable when his much-cited authority, Claude Bernard, asserts that "In arts and letters personality dominates everything. There one is dealing with a spontaneous creation of the mind that has nothing in common with the verification of natural phenomena, in which our minds can create nothing." Even were we to grant Zola's aspiration for a scientific novel, it would be subject to the same conditions of change that beset even the finest scientific work: it goes out of date quickly. In a sense, this would dismiss Homer's Odyssey because its physics is wrong. On one level, Zola is aware of this: "every phenomena, once clearly determined, destroys the hypothesis which it replaces, and it is then necessary to transport your hypothesis one step further into the new unknown which arises."

The problem, stated simply as a question, becomes: does literature become outmoded when its science goes out of date? If Zola's claims are to be taken literally, then the answer must be yes. And yet the continued relevance of literary masterworks argues quite the opposite. Matthew Arnold addressed a similar question in his essay, "Literature and Science" (1882), and his answer seems more compatible with our common experience of literature:

> But how...are poetry and eloquence to exercise the power of relating the modern results of natural science to man's instinct for conduct, his instinct for beauty? And here again I answer that I do not know how they will exercise it, but that they can and will exercise it I am sure. I do not mean that modern philosophical poets and modern philosophical moralists are to come and relate for us, in express terms, the results of modern scientific research to our instinct for conduct, our instinct for beauty. But I mean that we shall find, as a matter of experience, if we know the best that has been thought and uttered in the world, we shall find that the art and poetry and eloquence of men who lived, perhaps, long ago, who had the most limited natural knowledge, who had the most erroneous conceptions about many important matters, we shall find that this art, and poetry, and eloquence, have in fact not only the power of refreshing and delighting us, they have also the power,--such is the strength and worth, in essentials, of their authors' criticism of life,--they have a fortifying, and elevating, and quickening, and suggestive power, capable of wonderfully helping us to relate the results of moden science to our need for conduct, our need for beauty.

We would add that Zola's novels, even filled as they are with a dated pseudo-Darwinistic primitivism, remain relevant to our times and, in fact, help us to satisfy the instinct for conduct and beauty. But no doubt, Zola "had the most erroneous conceptions about many important matters," including science and psychology. Perhaps Zola did not mean to be taken quite so literally, but if not, what then becomes of his claim for an experimental novel being "in the way to explain the natural phenomena, both individual and social."

To study the science that can be gleaned from Zola's novels, even if it were accurate for his times, would only be to study the history of science or, perhaps, social-intellectual history. Such study is, of course, worth doing, but does such study give an authentic experience in the discipline of biology? The knowledge of a dated science might be necessary for a full understanding of certain pieces of literature--the Ptolemaic meaning of the word sublunary, for example, in John Donne's poetry--but the knowledge gained of science, per se, is negligible. Darwin's theory of evolution, for another example, figures in a large number of fictions, but a precise knowledge of Darwin's theory, by and large, only allows the reader to discover how the fiction departs from it. The knowledge enhances the reader's pleasure and understanding by contrast. In our course, we bring such contrasts to the forefront and encourage an exploration of the dialectic they suggest.

Our second long example demonstrates the pattern we use to encourage an exploration of the literature-science dialectic. When we read Herman Melville's Benito Cereno with our students, we have an opportunity to study race and racism. We first study race as a biological concept by citing its genetic structure and some of its biological and biochemical features. Then we read Benito Cereno which treats of black slavery, but the treatment is such that, on one level of the narration, the slaves are to be thought of as inferior human beings because of their race. Obviously, the novel's use of racial concepts is quite different from that of science.

Students read Melville's novel after they have read and studied Gregor Mendel's famous paper, "Experiments in Plant Hybridization" (1865). To the end of his life, Darwin knew that he had no way to account for the origins of biological variation in a species, but if natural selection was to work, such variability was necessary. Mendel's work provided the genetic answer that Darwin needed. When we introduce the subject of race, then, students have a fair understanding of evolution by natural selection and of the genetic mechanism by which it is effected. Much of his technical information comes into play when we discuss Richard A. Goldsby's Race and Races (1971) for the biological categorization of race. In that discussion, we consider some of the differences found among the races. Biologists define race as a closed, breeding population. Within such a restricted gene-pool, certain unique characteristics have a tendency to recur. These characteristics are expressions of those forms of the gene known as allemorphs, which manifest themselves in such things as blood type, fingerprint pattern, urine composition, and ear wax consistency. Some breeding populations are more apt to have certain diseases than others. Jews from Silesia, for example, have a high incidence of Tay-Sachs Syndrome (the destruction of the central nervous system), while American Negroes are prone to Sickle-Cell Anemia (a blood disorder). Curiously enough, skin color is the least reliable indicator of race, since a wide variation of skin color is possible in any race. But the existence of different genetic features does not account for racism; rather, racism arises from the meanings or values society has attached to these characterstics.

In Benito Cereno Melville addresses those deep cultural prejudices that distort the consciousness of even the good man. Since the story is told by one of the principal actors, Captain Amasa Delano, special care must be taken to introduce the student to the technical use of the term, point-of-view, in fiction. That is, the consciousness of the storyteller is fundamental to the attitude projected by the narrative. Delano himself is a humane man, and when he comes across a ship in apparent distress, his first impulse is to aid the survivors. He has mixed feelings about the institution of slavery, and yet he has categorical attitudes towards black men. In the story, for example, Delano describes the Negro as having a peculiar love for uniting industry with pasttime, as being good natured and good humored, as making the most pleasing body servant in the world. They are cheerful, love colorful display, and are set by God to some pleasant tune (that is, they've got rhythm). Later Delano thinks, "But if the whites had dark secrets concerning Don Benito [the white Spanish captain], could then Don Benito be any way in complicity with the blacks? But they were too stupid. Besides who ever heard of a white so far renegade as to apostatize from his very species almost, by leaguing against it with Negroes?" All of these attitudes toward the black man were apparently commonplace as early as the middle of the 19th century (and no doubt earlier), but to get at them in Melville's novel, the student must address the technical question of point-of-view with some care. At the end of the story, Delano discovers that, what he thought was a ship in distress (and what the blacks wanted him to think), was really a ship taken over in a slave rebellion. Because of his attitude toward blacks, then, Delano could not make sense of the many clues that would have led him to the true state of affairs.

By doing the biology carefully and then by analyzing the point-of-view in Melville's novel, we hope to give the student a richer appreciation of the vexed topic of racism. Through the biological examination of racial characteristics, the student has the data by which to examine the values projected on one level of the novel. Like some of the Southern apologists of the Nineteenth Century and William Shockley of the Twentieth, Amasa

Delano's consciousness is colored by a notion of heredity that marks blacks as inferior to whites, as, in fact, a different species. Nothing in biology justifies this attitude, and the novel itself, finally, undercuts it. The blacks, in commandeering the ship, have not only accomplished what Delano cannot imagine they could, but the blacks have so well understood the white man's conception of their inferiority that they have used that knowledge almost to make good their revolution. At the end of the novel, moreover, neither Amasa Delano nor Benito Cereno has learned much about the blacks' humanity or their desire for freedom.

In our course, then, we study biology in order to show how far literature is amenable to scientific considerations, but also to show that factual considerations in themselves are insufficient to resolve many fundamental questions. Biological study, however, can provide a solid basis of data against which attitudes can be tested. Even should we arrive at that place, so hoped for by Zola, where we can understand the mechanism of human passion and the laws by which it operates in society, to know those mechanisms, those facts, will not absolve us from the painful work of choosing which passions to enhance and which to discourage. To know a fact is not to choose a value. But to choose a value wihout a grounding in the pertinent facts seems less than wise. At the moment, the best service we can provide the students in our course on literature and biology is to put the two disciplines in a living dialectic, to insist they learn the basic fundamentals of each, and for the larger aim, to indicate how the dialectic suggests the rich multifacetedness of human experience.

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Arnold, Matthew. "Literature and Science" (1882).

Goldsby, Richard A. Race and Races (1971).

Melville, Herman. Benito Cereno (1856).

Mendel, Gregor. "Experiments in Plant Hybridization" (1865).

Zola, Emile. "The Experimental Novel" (1880).

ADDENDUM

The Reading List that follows was organized according to the order in which the readings are presented in the course. Following each title we have indicated some of the concepts and techniques handled. Though incomplete, it suggests the order and nature of the final syllabus.

Lyell, Charles. Principles of Geology (1831), selections.

1. Uniform Causes vs. catastrophes in the development of the earth.
2. Evidence for the earth being very old.
3. Climatic changes and their effect on plant and animal life.
4. Extinction, not survival, as the more normal pattern of organic life.
5. The influence on Darwin and Wallace.

Darwin, Charles. Voyage of the Beagle (1837), selections.

1. The dispersal of species by wind.
2. Fossil discoveries in geological strata.
3. The animals of the Pampas and their grazing patterns.
4. The effect of earthquakes on mountain formation and what that tells us of the flora and fauna (past and present).
5. The formation of coral reefs.
6. The part played by islands in isolation on evolution.
7. Darwin's observations on the Galapagos, especially his notations on species variation among the finches.

Darwin, Charles. The Origin of Species (1859), selections.

1. Artificial selection contrasted to natural selection.
2. Characteristics of Rock Pigeons and their descendants.
3. Consideration of the numbers of species, extant and extinct, and the relationship of those species.
4. Species evolving from common ancestors.

Melville, Herman. The Encantadas (1856).

1. Use of imagery: figurative and non-figurative.
2. Description, which includes imagery, creates the mood and atmosphere.
3. Known as Melville's Inferno, this theme arises from the description.
4. Melville's literary use of his experience on the Galapagos contrasts with Darwin's scientific use.

Wells, H.G. The War of the Worlds (1897).

1. Use of Extrapolation: a principal technique in the construction of science fiction.

2. Wells's speculative extrapolation of the theory of natural selection.
3. Wells's speculation compared to Darwin's work.

Huxley, T.H. "Science and Culture" (1880)
Arnold, Matthew "Literature and Science" (1882)
Snow, C.P. "The Two Cultures" (1959)
Leavis, F.R. "Two Cultures? The Significance of C.P. Snow" (1962)

1. Structure of argument: assertion, evidence, chain of reasoning, refutation.
2. Origin of debate and issues involved.
3. Comparison and discussion.

Mendel, Gregor. "Experiments in Plant Hybridization" (1865)

1. Experimental method and verification.
2. Genetic structure of pure breeds and hybrids.
3. Sexual Morphology and fertilization in Pea plants.
4. Crosses and results: statistical distribution.
5. Mendel's Laws.
6. The discovery of Mendel's significance in the early 1900s.
7. Since Lamarckian inheritance comes up in another context, we also show how Lamarck's ideas, based on environmental effects, are undermined by Mendel.

Melville, Herman. Benito Cereno (1856)

1. Use of point-of-view: a principal consideration in reading fiction.
2. Analysis of Amassa Delano as narrator, and thus of point-of-view.
3. Delano's consciousness is colored by an attitude that regards Negroes as inferior human beings.
4. Other facts of the narrative undercut Delano's point-of-view.

Solzhenitzyn, Alexander. One Day in the Life of Ivan Denisovich (1963)

1. Use of character development and contrast.
2. Array of characters reveal different attitudes towards imprisonment.
3. Basic biological needs of food and shelter.
4. Parasitism and patterns of feeding.
5. Man as a worker and tool maker.
6. Metaphor for police state.

MANAGEMENT MODELS IN HOMER'S *ILIAD*: DESIGN AND IMPROVISATION

Edward Zlotkowski

Background and Context

During the spring of last year, as Bentley College's new Interdisciplinary Program began to solicit course proposals, I approached Professor Wondoloski of the Management Department with an idea. My idea was to design a course that directly linked business and the liberal arts, a course that addressed in a new, aggressive way Bentley's self-described mission to produce "liberally educated professionals." For although the college requires all students, regardless of their major, to take at least 45% of their courses in the arts and sciences, many of the school's predominantly business-oriented students fail to appreciate the logic of linking business and liberal studies. For them their education falls into two distinctly separate and unequal halves: the study of at times interesting but clearly impractical ideas and the acquisition of at times boring but clearly valuable skills. In the first instance, everything is subjective - ambiguity and relativity run rampant. In the second, there is safety in certainty - answers are either right or wrong. Furthermore, it is this second half that actually prepares one for the "real world."

That students should experience such a gap is disturbing but hardly surprising. Rarely do their liberal arts and business professors do more than dine and serve on college-wide committees together. Neither side of the faculty has all that much understanding - or even appreciation - of what the other side does. While most liberal arts professors know almost nothing about subjects like Accountancy and Finance, many business professors reveal a distinctly limited cultural awareness. If the touchstone of the first group is the Western intellectual tradition, the touchstone of the second is the activities of contemporary corporations. In short, the differences between these two groups are so great, it is difficult to see how, in students' minds, the idea of an integrated business-liberal arts education should amount to more than an official abstraction.

Hence, the idea of a team-taught business-liberal arts course seemed not only fascinating, but singularly appropriate. It would provide a concrete opportunity to put to the test the college's

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governing philosophy. To be sure, it wasn't at all clear that I myself was qualified to conduct such a test. My own background was pristine liberal arts: Latin, Greek, European and British literature, Philosophy, History. True, I had had extensive experience teaching interdisciplinary courses. However, these had all been within the humanities, and I knew next to nothing about business disciplines. In other words, I had to count myself part of the problem I have just described. To a considerable degree, my proposed course would have to be an exercise in self-education.

The general nature of what I had in mind was as follows. Together with a representative of the Management Department I would lead a seminar on Homer's ILIAD whereby the characters and incidents in the Greek text would provide a series of case studies and jumping-off points for issues in contemporary Management theory. I chose the ILIAD for several reasons. It was a text I had already taught several times. I knew it sufficiently well to "play" with it - i.e., use it without fear of abusing it. Second, it seemed to me to offer a large number of different leadership models and styles. After all, it is a work full of heroes and divinities with colossal egos, each trying to effect his or her own agenda. Furthermore, if one regarded the Greek army as an organization fueled by profit acquired through competition (i.e., the winning of spoils), one had here a phenomenon not completely dissimilar to the contemporary corporation. Finally, I chose the ILIAD because, despite all such possible parallels, there could be absolutely no question of common origin or direct influence linking the two areas to be juxtaposed: I specifically wanted to set up a business-humanities tension that could not be historically resolved.

To my great delight, Professor Wondoloski thought my idea worth pursuing and immediately began working his way through the ILIAD. That he himself had to approach it as a beginner turned out to be very useful for it forcefully brought home to me the kind of work I would need to do to make Homer's world transparent enough to serve as an occasion for contemporary Management theory. For what I had in mind was an extended, detailed juxtaposition. Students electing this course would have to master the ILIAD on its own terms as well as learn to use it to study and discuss contemporary Management theory. Perhaps at this point it would be useful to cite the statement of purpose I prepared for the college's Curriculum Committee.

> Literary texts can provide a base from which one can examine many aspects of human behavior. Most students come to college with some experience in

> reading literature but with little experience in identifying and using concepts, theories, and paradigms useful in understanding business organizations. The present course aims at providing an experience central to Bentley's mission and sense of itself: a bridge between business skills and liberal-arts interests. To do this the course will guide students through a flexible examination of one of Western civilization's greatest texts, Homer's ILIAD, in order to sharpen their ability to analyze complex texts and complex human situations as well as to help develop in them an appreciation of the relationship that exists between organizational concepts and general culture, between social structures and activities and underlying world views. By comparing conceptual perspectives and leadership models from the society of the ILIAD with those of our own, the course will help put the study of business topics in a cultural and historical context that will allow students to appreciate better the logic of linking a general education with a pre-professional focus. Subsidiary areas to be explored will include: conceptual tools relevant to the analysis of human behavior, pattern recognition, hidden contextual factors, and personal leadership styles.

In other words, there was to be here no "servant-master" relationship. Students would be expected to develop and demonstrate genuine competence both in textual analysis and in the utilization of Management concepts. Cultural as well as business awareness, literacy as well as contemporary applicability would be stressed. In this way I hoped to enhance not only every participant's appreciation of both literature and Management theory as valuable sources of understanding, but also to demonstrate concretely the essential compatibility of the kinds of insights each could provide. Not only could a literary text provide useful Management models; not only could Management concepts shed light on a literary text; skills such as cultural perceptivity, character analysis, and pattern recognition were important to both areas. What one learned in one's liberal arts courses was not - or, at least, should not - be irrelevant to the work one did in one's business courses, just as the tools with which business disciplines provided one could - and should - prove useful outside of specific business situations.

Needless to say, such an attempt to bring together business and liberal arts interests was hardly new. Though this was the first course of this nature to be proposed at Bentley, it wasn't at all hard to find people who had heard of similar courses elsewhere.1 Nor was it difficult to locate books and articles that even addressed the same Homer-business juxtaposition I was interested in exploring.2 Indeed, the fact that such an idea was neither novel nor radical helped facilitate its approval. Such a course might even help create a curricular "slot" for future literary-business couplings. For although "Management Models in Homer's ILIAD" might not interest any other faculty team, authors as varied as Dickens and Machiavelli suggested the possibility of many other analogous combinations.

And yet, "Management Models in Homer's ILIAD" was not approved without dissent. In some ways the course did break new ground. For since it was indeed envisioned as a fully balanced literature-business collaboration, it was intended to provide either English or Management credit. No course in the school's history had ever offered such an option, and faculty members on both sides of the liberal arts-business divide expressed fears that either the literary or the business side of the undertaking would be short-changed. To answer this concern (which was strongest in certain non-Management business departments), Professor Wondoloski and I set about preparing an extensive list of Management readings - as well as a specification of key textual themes. In the end, many of those committed to the necessity of keeping disciplines - especially liberal arts and business disciplines - separate and unequal remained opposed, but enough people became convinced to allow the course to run as an experiment. Both the English and the Management departments declared themselves willing to accept it for elective credit.

However, the course also raised a second set of purely conceptual questions - questions that may have contributed to some of the skepticism referred to above, but that also led to other, more substantive issues. For as I have already mentioned, the Homer-Management connection was intentionally "arbitrary" in a way in which many other literary-business pairings would not have been. After all, Dickens's novels do take place within a capitalist economic context, and Machiavelli's approach to government hardly seems remote from contemporary practice. In the case of Homer and Management, however, we had no such connections to fall back on. Here there could be no talk of a shared historical context, no talk of underlying influence or tradition. Indeed, Homer's culture seemed to possess a long list of features with no contemporary equivalents.

I was not unsympathetic to such reservations. The incongruity in this case was indeed considerable. Nor did the above-mentioned fact that Homer already had been used to generate Management models really serve to answer this concern. For it is one thing to extract a brief parallel, example, or lesson from Homer: at a certain level of generality one need not worry about either textual integrity or details that find no ready modern equivalent. But it is quite another thing to work with all 24 books of the ILIAD, taking very seriously their internal integrity while at the same time using them to explore a very different set of interests and ideas. Indeed, one could even argue that Homer's heroic world is so vivid, so complete, so intrinsically adequate to human experience that it discourages rather than invites outside comparisons.

But, again, the very difficulty of combining a careful, sustained reading of the ILIAD with an equally extended discussion of contemporary Management theory was central to the course's design and appeal. The juxtaposition was meant to be difficult, startling - even fantastic. For beyond all workmanlike demonstrations of the ways in which one could use Management concepts to analyze aspects of the ILIAD and sections of the ILIAD to illustrate Management concepts, lay a more elusive and fundamental pedagogical imperative: to jar business-oriented students into radical forms of business-related conceptual creativity, to help them see Management ideas and paradigms with a freedom and spontaneity usually reserved only for less "practical," more aesthetic subjects. For this task the Homer-Management discrepancy was essential.

Course Particulars

Course enrollment turned out to be almost ideal: 18 students, half of whom elected the course for English credit; half, for Management credit. We chose our space carefully. Since our intention was to create an open, informal atmosphere that would encourage intellectual risk-taking, we arranged for a room with chairs instead of desks. We also arranged for a room with a rug since Professor Wondoloski and I wanted to experiment with a practice we had both used in the past: namely, beginning each class session with a few relaxation exercises.3 The purpose of these exercises was not only to help students become more focused and alert in class but also to create a sense of the class as something special. Hence, at our first meeting, we also called explicit attention to the experimental nature of the course: we wanted our students to understand that they were co-responsible for its operation and success. From each of them we needed a conscious personal commitment to the process of analysis, discovery , and creation. Each session's initial relaxation sequence would serve as a reminder and re-affirmation of that commitment.

The first few classes we devoted to orientation and mapping.

I provided the students with an historical and literary introduction to the world of the ILIAD. Professor Wondoloski did the same for Management theory in the 20th century. After that we settled into a regular Monday-Wednesday rhythm in which we would first discuss a specific book of the ILIAD (e.g., Book 1: the proem; the situation at Troy; the characters of Achilles, Agamemnon, and Odysseus; the honor system; man-god relations; mortal vs. immortal society). Then, on the following Wednesday, we would discuss Management topics in some way related to Monday's analysis (e.g., organizational culture, organizational stress, frames for understanding organizational dynamics). For each Wednesday students were asked to prepare one set of primary Management readings. A set of secondary Management readings was suggested but not required.4 Such a rhythm allowed us to respect the textual and cultural integrity of the ILIAD while at the same time using it to generate extra-textual topics and problems. It also allowed us to discuss directly various Management theories and paradigms. By the end of the fourth week of the course I was reasonably satisfied that the text's literary identity had not been sacrificed to topical expediency. At the same time I was appreciative of just how easily the text generated specific issues susceptible to Management analysis.

In general, the ILIAD-Management connections we made tended to take one of three forms - two more or less straightforward, the third more difficult to typify. The easiest connection was the use of the ILIAD to generate specific Management models. Here we began with the Homeric text, made an effort to understand it on its own terms, and then reviewed it from a Management perspective. Thus, we not only attempted to understand the particulars of Achilles's and Agamemnon's behavior in Book 1; we also attempted to see that behavior in the light of modern theories of organizational stress. Regardless of the degree to which the latter proved useful, our primary analysis of the characters on their own terms remained valid.

The second kind of connection we made began not with the ILIAD but with Management concepts. We first examined the latter in and of themselves (i.e., in a modern corporate context); then we tested their Homeric "serviceability." Thus, on one occasion, we began with a discussion of the various kinds of corporate players identified by Michael Maccoby in his book THE GAMESMAN.5 Then, after these categories became clear in their own right, we asked students to "try them out" on various Homeric figures. When such categorization worked, it led students to develop a fuller picture of the gods and heroes; it also helped make these figures more accessible by identifying them with contemporary types. When, on the other hand, the Management categories proved unsuitable, this fact at least helped raise the issue of their cultural relativity. In either case the students came away with new Management tools as well as an enhanced appreciation of Homer's text.6

The final kind of text-Management connection we worked with sought to create rather than merely identify correspondences, and for me this was by far the most exciting aspect of the course. For here we helped students learn not merely to analyze and accommodate but to invent. Instead of simply leaving them with the recognition that some parallel or application was not appropriate, we actually charged them with the creation of missing conceptual equivalents: if item 1 in column "a" WERE to find an equivalent in column "b," what would it look like? Such a task could sometimes lead to radical new leaps in understanding as students came to grips with the way in which paradigms actually screen out of existence whatever doesn't fit their needs or aims.

Here we were close to the course's creative-pedagogical heart. Here the course's designed discontinuities found their final justification. For as valuable as the lesson of liberal arts-business compatibility is, as important as it is to realize that literary models can illustrate business concepts just as business concepts can help illuminate literary texts, nevertheless such lessons simply do not possess the same kind of educational potential present in the process of paradigm testing and paradigm completion here referred to. For it is only here where students are asked to come up with new concepts and new possibilities that creativity itself becomes the central issue: the very PROCESS of imaginative seeing becomes the goal of the pedagogical effort. If the movement from Homeric text to Management theory or from Management theory to Homeric text may be said to resemble the leap a spark makes across an electrical gap, the transcendence of inherited paradigms - social, cultural, institutional - the creation, however tentative, of new "maps" of reality - may be said to resemble a bolt of lightning.

Let me provide one brief example of what I mean. At one point during the first half of the semester we had set aside a class for reviewing and synthesizing some of the Homer-Management connections we had suggested up until that point. During the course of this review we began developing a Homeric-contemporary society comparison structured along the lines of a "Levels of Culture" paradigm by Edgar H. Schein.7 We had recently been working with Book 4 of the ILIAD where the gods decide on their own that all human attempts to end the Trojan war peacefully must fail. We had already had several discussions about the nature of the Homeric gods and the Homeric concept of fate, but we had not yet made any attempt to render these forces comprehensible in contemporary terms. But now the students pressed: where in contemporary organizational/social thought was there anything comparable to Homer's concept of fate, his miracles, his divine amplifications and promptings? Rather than jot down a few facile "equivalents" we stepped back to consider the way in which these various forces interacted with his heroes' conscious plans and decisions. This, in turn, led us to develop a model of conscious individual reason surrounded by opaque forces that sometimes served to undermine, sometimes to amplify that reason. We then considered the core of conscious planning and decision-making that largely defines the identity of modern managers and corporations. However, even a moment's thought showed that conscious reasoning and planning were not the only deciding factors here. We also had to take into account the unexpected ("chance"), strong emotions, "inspirations," an open-ended sense of identity and development. How effectively did modern Management theories take these factors into account? Did they validate or dismiss them? Was Homeric man's constant acknowledgement of extra-rational factors a sign of greater weakness or greater strength? How did he use these factors to enhance his identity and potential? Were there any lessons here for modern managers, for modern corporations? Suddenly everyone in the room was re-examining their assumptions regarding unforeseen and/or non-rational forces, and the ways in which they dealt with these in their lives. None of this effort came out of any specific ILIAD-Management reading, but everyone in the class came away from that particular session with a new appreciation of the contemporary psychological and organizational implications of Homer's "primitive" world view. We had been forced to question the sufficiency and effectiveness of our own cultural paradigms.

Classes such as the one just described were the exception rather than the rule. Nevertheless, it was the possibility of such spontaneous creativity that all course activities were designed to promote. Although we always had a class agenda, we were also always prepared to abandon it when someone unexpectedly stumbled upon a conceptual opening that made him/her stop and think. To help prepare the ground for as many such fortunate accidents as possible, a major course assignment involved weekly journal entries in which conceptual risk-taking was the main item of business. There was no insight, no suggestion, no connection the class would not at least temporarily entertain. We wanted to help our students shed as much intellectual timidity and imaginative fear as possible. Hence, we also encouraged a lot of small-group work where shared intuitions helped generate speculation and momentum. In larger, individual midterm and final projects we provided students with sufficient opportunity for detailed observations and considered judgments. All in all, we saw more danger in excessive than in insufficient caution.

Conclusion

Recently there has been much heated controversy about the direction in which education in the United States should move. It is difficult to gainsay the sense that something is indeed wrong. In so many intellectual and economic areas we seem to be losing our international pre-eminence. For some the road to regeneration is paved with educational basics, and who can argue against the importance of sound literacy and competence in elementary verbal and mathematical skills? Still, it seems to me that even a successful return to basic skills will not in itself "save" us. Beyond the ability to write and read and reckon is the ability to imagine - to imagine something new, something better, something beyond a re-arranging of givens. I am glad I work mostly with students majoring in business. Whether or not I share their specific professional interests, the fact remains that at least some of these students will be among those leaders whose decisions shape the country's future. Hence, I feel I have a special opportunity and a special obligation in teaching them. When I consider what my students really need from me, I am forced to conclude it is not a set of literary notes they can memorize and discard, nor is it a set of maps to the cultural geography of the past. If being a "liberally educated professional" means anything, it must mean the ability to think and see freely - beyond the limits of inherited conceptual models. This is the real content of "Management Models in Homer's ILIAD." For me there is no educational exercise more important - or more basic.

Endnotes

1. For example, much work in this area has been done under the auspices of the Hartwick Humanities in Management Institute at Hartwick College in Oneonta, New York.

2. See, for example, John K. Clemens & Douglas F. Mayer, THE CLASSIC TOUCH: LESSONS IN LEADERSHIP FROM HOMER TO HEMINGWAY. Homewood, Illinois: Dow Jones-Irwin, 1987. Clemens and Mayer also provide an up-to-date bibliography of works dealing with literature and philosophy as sources of Management insights.

3. Although we experimented with various exercises, our basic sequence has involved 1. light stretching, 2. deep breathing,

3. meditative breath-awareness. My own pedagogical experience with this practice has been extremely positive. Indeed, students have found it so useful in promoting focus and attention, many have made it a part of their personal routines.

4. Our primary source of Management texts was Louis E. Boone & Donald D. Bowen, eds., THE GREAT WRITINGS IN MANAGEMENT AND ORGANIZATIONAL BEHAVIOR. 2nd ed. New York: Random, 1987. However, we also drew upon many other sources. One of the more heartening aspects of preparing this course was the bibliographic assistance Professor Wondoloski and I received from many members of the Bentley Management Department.

5. Michael Maccoby, THE GAMESMAN. New York: Simon and Schuster, 1976.

6. One especially effective variation on this second type of connection involved providing students with some tool of organizational analysis and then sending them out as "textual consultants." In this way they also learned to appreciate the power of cultural factors to effect or obstruct resolutions.

7. Edgar H. Schein, "Coming to a New Awareness of Organizational Culture," Boone & Bowen, eds., THE GREAT WRITINGS IN MANAGEMENT AND ORGANIZATIONAL BEHAVIOR, Chap. 27, pp. 443-461.

SALARIES OF PART-TIME FACULTY: WAYS TO ASSURE CONTINUITY IN THE INSTRUCTIONAL PROCESS

Raymond W. Campbell, Ph.D.

Introduction

In the report Involvement in Learning: Realizing the Potential of American Higher Education, serious concern was expressed about the increasing use of part-time faculty. Specifically, the report cited the following evidence: "The proportion of faculty who teach part-time increased from 23 percent in 1966 to 41 percent in 1980. The higher the proportion of part-time faculty, the more difficult it becomes to maintain collegiality, to assure continuity in the instructional program, and to preserve coherence in the curriculum" (Study Group on the Conditions of Excellence in Higher Education, 1984, p. 11). While the study group responsible for this report encouraged institutional officials to consolidate as many part-time positions as possible into full-time positions, it also recognized the importance of part-time faculty: "Part-time positions should be used to attract individuals with special talents and abilities and to provide flexibility in staffing special programs...." Their importance, together with their continuing existence as part of the higher education landscape, was recognized in this suggestion: "Administrators should encourage these instructors to strengthen their ties with the institution, to have contact with students outside the classroom, and to participate in the institutional environment as fully as possible" (Study Group, p. 36).

The means by which the many employing institutions have built good working relationships with their part-time faculty have included such activities as the offering of instructional improvement workshops, the establishment of office space and mailboxes, and the assignment of full-time faculty mentors. Over the years, the continuing employment of part-time faculty has prompted a number of scholars to conduct studies designed to keep educators and their institutions apprised of activities like those mentioned in the preceding sentence. Oftentimes, however, studies in this area have not taken into account the importance salary plays in assuring continuity in the instructional process (i.e., the recruitment and retention of effective part-time faculty). Salary data are often viewed as descriptive statistics only, with almost no connection to the impact they may have on instruction. A recent local survey of chief academic officers in the Philadelphia metropolitan area regarding part-time faculty salaries has revealed that institutions vary greatly in the salary structures they have created to pay their part-time faculty. For a

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Raymond W. Campbell, Ph.D., Chairman, Department of General Studies, College of Allied Health Sciences, Thomas Jefferson University, Philadelphia, Pennsylvania 19107 three-credit undergraduate course, the structures range from a flat rate per course to fairly elaborate salary scales based upon combinations of several factors, with ten different systems in all.

Purpose and Methodology

The purpose of this paper is to allow college representatives, concerned about continuity in their instructional program as it relates to part-time faculty, an opportunity to compare pay scales in their own institutions with the salary schedules in place at institutions in the Philadelphia area. The preponderance of adult evening and weekend programs in the Philadelphia metropolitan area (including the use of part-time faculty in this area's day programs) makes it a good resource in terms of the variety of ways part-time faculty salary schedules are structured. The analysis of this salary data will enable college personnel charged with working with part-time faculty the opportunity to examine the extent to which salary patterns may serve as recruitment and retention mechanisms for part-time faculty as well as factors relevant to the larger purpose of enhancing undergraduate education.

A letter was sent out in September of 1987 to chief academic officers of 46 area institutions. These Philadelphia-area colleges and universities offer two-year, four-year, graduate and professional degree programs. Their inclusion in this study was based on their frequent mention in the local press in articles about higher education in general and/or in news stories about specific developments at particular institutions. The letter requested that each academic officer share his/her institution's pay scale for part-time faculty teaching three-credit undergraduate courses. Because it was anticipated that some institutions would have differentiated pay scales, the request for this information was intentionally left open-ended.

Profile of Responses

Thirty-five of the 46 institutions replied, for a response rate of 76%. Of these 35 institutions, 24 were private and 11 were public. The 24 private institutions were composed of 2 junior colleges, 3 universities, 5 specialized colleges and 14 liberal arts institutions. The public portion of the sample was composed of three colleges, three universities and five community colleges.

Salary for a part-time faculty member teaching a three-credit course ranged from $801 to $5600. The mean, median and mode were $1693, $1416 and $1200, respectively.

Although not directly asked as part of this study, but gleaned from the various materials reviewed, the most prevalent way (20) institutions calculated part-time faculty salaries was on a rate-per-semester-course basis. Seventeen other institutions computed part-time faculty salary patterns on a semester credit-hour basis. Two of the institutions actually showed salary costs in both formats--per semester course and per semester credit hour. One institution, in addition to its pay table showing per-semester-credit-hour costs, showed per-contact-hour costs. This last finding conflicts with Gappa's (1984, p. 70) earlier work where she noted that nationally the hourly (contact) rate was still the most prevalent salary pattern. While one could argue that a cost per contact hour underlies the predominant rate-per-semester-course pattern found in this study, the actual schedules examined did not overtly reflect that pattern. From the materials examined, it was also revealed that the semester calendar was the most commonly used academic calendar in the Philadelphia area.

Seven of the 35 institutions pay their part-time faculty a flat rate per course, with no difference in pay between those prepared at the master's level and those prepared at the doctoral level. These rates ranged from $801 to $1915. The lowest rate in this category was paid by a community college; the highest rate was paid by a private liberal arts college. The other institutions employing this method of payment included: another community college, two specialized private colleges, one public college, and one public university.

The remaining 28 institutions in this study, while ultimately paying their faculty a per semester stipend, have salary patterns in place that are differentiated along one or more dimensions. This differentiation in general seems to imply that a number of the institutions participating in this study have implemented payment scales that respond to the faculty's educational preparation and longevity of service.

These differentiated patterns can be categorized into nine groups: pro-rata share, equivalent ranks, home institution rank, credentials and semesters, credentials and years, credentials and credits, credentials and location, credentials and time, and credentials only. The first group, and what Gappa (pp. 70-71) classifies as the third most prevalent salary pattern nationally, part-time faculty receive a pro-rata share of a full-time salary. In the two public universities and one private specialized college that utilize this method, the faculty are usually paid at the appropriate rank and step, as determined by their qualifications and the institution's need. Whether the faculty actually carry the professional ranks for which they qualify was not clear from the information received.

Four other institutions have also established pay scales based on the rank for which the part-time faculty member has qualified. However, from this group's information, it appears that in addition to using the appointment criteria to determine pay, the institutions actually appoint their part-time faculty to professorial rank. The materials did not reveal whether the criteria are the same for full-time and part-time appointments.

Three institutions indicated that they honor the part-time faculty member's rank at his/her home institution in calculating the individual's pay, but do not actually appoint a person to a rank. When a person does not hold rank at another institution, two of the institutions evaluate the individual's qualifications to determine their equivalency to the appropriate appointment criteria and corresponding rank. The individual is then paid at this level. The third institution treats the person without home faculty rank (e.g., a government employee) as a lecturer for pay purposes. At this particular institution, this pay level is the lowest for terminal degree holders. All three institutions title all their part-time faculty members who hold terminal degrees, lecturers.

The most popular (6 institutions) differentiated salary system was one utilizing a combination of credentials and semesters taught. The disadvantage of this system, however, is its built-in unfairness to the part-time faculty. That is, two part-time faculty may have worked an equivalent number of semesters, but one may have taught only one course per semester, while the other may have taught several courses per semester.

Four private institutions use a similar pattern as that mentioned above but instead of relying on credentials and semesters of service, they rely on credentials and years of services. Again, while this system helps to control institutional funds allocated for longevity increases, it does not recognize those part-time faculty who teach several courses every semester or year. Absent in the materials received from this group and from the other groups as well, was any information about the evaluation of part-time faculty and its impact on salary. It seems reasonable to assume that longevity would be directly related to on-going competent and effective teaching. However, neither this study nor the materials received addressed this connection.

Only one of the institutions studied, a specialized private college, takes into account the number of credits taught (instead of semesters or years) in calculating pay. No distinction is made regarding those faculty who possess a master's degree and those who have a doctorate. Both levels of preparation receive the same base pay, with increments of $50 being added at each credits-taught interval of 30, 60 and 90.

Two of the private liberal arts colleges base their salary schedules on the individual's qualifications and the location of the course, with off-campus courses paying more. This is also true for one of the three institutions mentioned above in the group honoring an individual's rank at his/her home institution. This third institution increases the base salary by fixed percentages of 7.5 and 15 for distances between 26 and 75, and over 75 miles, respectively. While it was evident that two of these private institutions pay more per course to a holder of a terminal degree, it was not clear from the information received that the same was true at the other college.

Another of the private liberal arts colleges added a different twist to the data by disclosing that its part-time salary schedule differed based on whether an individual was teaching in the daytime or evening. No rationale was offered to explain the difference. However, the higher daytime scales may have been at least partially connected to rewarding the full-time faculty for teaching an overload and/or difficulty the college was experiencing recruiting part-time, day faculty. The evening pay scale was also higher for the full-time than for the part-time faculty. Again, the system appeared designed to encourage the full-time faculty's participation in as much of the instructional program as possible.

Four institutions base their salaries for part-time faculty on credentials only. In two of these institutions, credentials translates into whether a person has a master's degree or doctoral degree. The third institution adds a middle level--doctoral candidate. The fourth institution never really defines what it means by credentials and acknowledges that while its open-to-negotiation salary system has worked well thus far, it is not a universally-used system.

Implications for Practice

The findings in this study indicate that institutions more often than not are responsive to their part-time faculty through their recognition of such variables as educational level, length of service, location of courses and time of courses. However, it is not clear whether the individual institutions have taken into consideration the needs and characteristics of their part-time faculty. For example, in the group of institutions that utilizes credentials and semesters (taught) as the basis for computing salaries, part-time faculty who teach several courses a semester are at a distinct disadvantage. As alluded to earlier, there is also a tendency on the part of institutions to view salary data in strictly numerical terms for comparison purposes. That is, having learned what the competition is paying part-time faculty, an institution adjusts its rates accordingly to maintain its relative position. Adding an additional step to the process of establishing part-time faculty salaries--one sensitive to both institutions and faculty--may strengthen an institution's ability to assure continuity in the instructional process as it relates to part-time faculty.

As part of an institution's salary-setting process, this additional step would include some systematic understanding of the institution's part-time faculty. How much, if any, an institution will need to adjust salaries upward for part-time faculty may depend partially on their reasons for becoming part-time as well as on local competitive rates.

Tuckman (1978) identified seven categories of part-time faculty:

1. Full-Mooners--persons already holding a full-time job.

2. Students--persons employed in institutions other than the one at which they seek a degree.

3. Hopeful Full-Timers--persons who could not find a full-time position.

4. Part-Mooners--persons holding more than one part-time job.

5. Homeworkers--persons who prefer part-time employment in order to care for a relative or child at home.

6. Semi-Retired--persons who are partially retired.

7. Part-Unknowners--persons who work part-time for reasons other than those listed above for becoming part-time (pp. 305-315).

An institution that employs full-mocners, homeworkers or semi-retired people may not need to go much beyond "a competitive base salary" if its part-time faculty have needs other than financial ones motivating them (e.g., association with a university, flexibile work schedule, intellectual pursuits, etc.).

On the other hand, if an institution finds that its cadre of part-time faculty are mostly students, hopeful full-timers and part-mooners--three categories that tend to be less well off financially--then the pressure to go beyond a competitive base salary will be much greater. This will be especially true in competitive urban areas where many institutions are always vying for effective part-time faculty. Chances are members of these groups will be much more inclined to switch to another institution for higher pay.

Tuckman's taxonomy represents just one tool that can be used by administrators to gain a greater understanding of their part-time faculty. Regardless of the tools or methods selected to enhance administrators' understanding of their part-time faculty, the more important development is the recognition by administrators that the salary setting process should be refined and given careful attention.

Conclusion

One of the ways an institution employing part-time faculty can help to assure continuity in its instructional program is to re-examine its current salary scale for this group. At a minimum, it needs to make certain that its salaries are on par with its local competitors. Beyond establishing this competitive base salary, the institution, using such means as Tuckman's taxonomy, should investigate the composition of its part-time faculty. By learning about the characteristics of their part-time faculty, including motivational factors, an institution will be in a better position to gauge whether the institution's competitive base salary is sufficient to retain current faculty and attract new ones. Institutions interested in building and maintaining a part-time faculty of the highest quality must decide upon salary systems that will help to attract the very best part-time faculty and reward longevity only as it relates to competency and effective teaching.

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CREATING COHESION VIA FACULTY DEVELOPMENT ACTIVITIES
Julia A. Daniels

Faculty Development Programs for Mavericks - the Extended Degree Program of Central Michigan is unlike any other in the country. Over 500 part-time, off-campus adjunct faculty and over 150 on-campus faculty teach in 50 learning centers in the United States and Canada. These centers are divided into four regions where 12,000-plus adult students are completing or have completed a Master of Science in Administration degree. Instructors come from both academic and non-academic careers and undergo a rigorous approval-to-teach process, including department and Academic Council approvals, and end-of-course evaluations which are required of both students and faculty. Because of the geographic distribution, many instructors have to fly to their classrooms while others drive several hours in large metropolitan areas or through rural settings. Some faculty teach in spartan classrooms on military bases while others teach in fully equipped modern classrooms designed specifically for University courses. Clearly such a diverse and spread out instructional staff demands unique and creative lines of communication with a strong emphasis on building cohesiveness and an esprit de corps. This presentation will discuss various ways in which CMU bonds its faculty members and creates an identity with the main campus.

I. Faculty Development Seminars

Instructors meet yearly to discuss common problems, course content, successful instructional techniques, frustrations of teaching in off-campus locations, and general matters of student and administrative details. This gathering provides proof to our instructors that their input is vital to our program and that their professional needs are a primary concern. A sense of community is established by these meetings while at the same time an identification and understanding of the home campus is created. The meetings are evaluated by the instructors and subsequent meetings are planned, in part, with their recommendations.

II. Curriculum and Professional Development

A. Our faculty are an excellent source of expertise in the area of teaching and curriculum, and we capitalize on this in several ways. For example, many instructors have voiced frustrations about directing research projects required in one of our master's level courses. Major improvements resulted from an intensive brainstorming session of these instructors who were brought to campus for two days to explore this problem.

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This idea has been expanded upon to a series of Round Table discussions designed to both solve existing problems and to generate new information which will contribute to the base of knowledge in the field of teaching adults in extended degree programs. A 30-minute video tape of our first Round Table I: Teaching in the Compressed Format will be shown at this conference.

B. Instructor Support - Faculty are also encouraged to engage in pure research as well as less formal research projects by applying for small grants and stipends. Attendance at national meetings of associations committed to non-traditional education, both as presenters and attendees is encouraged and partially supported.

In addition, Central Michigan University has hosted a major national conference, Adult Learners in Higher Education: Planning for Excellence. This conference will be a bi-annual event.

III. The Mentor System

One of the most personal ways the University can create an identification process and facilitate bonding among its colleagues is utilizing a professorial mentor system. Experienced faculty members are invited to serve as a mentor: a trusted counselor or guide, a tutor. There are many positive outcomes of this system, but the most obvious and critical are increased job satisfaction and performance.

IV. Communications to Faculty

Our faculty receive two publications, The Communicator and the Faculty Update. The former is published bi-monthly and highlights the accomplishments of our M.S.A. students. The Update is a professional newsletter featuring research summaries on teaching techniques, curricular issues, bibliographic listings, explanation of our unique library services and ongoing reports of faculty development activities.

A videotape of approximately 30 minutes will be shown.

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FACULTY DEVELOPMENT IN EAST CENTRAL COLLEGES IN WAYS OF KNOWING

Larry E. Grimes and Nancy Siferd

East Central Colleges (ECC) is a consortium of eight private liberal arts colleges in three states: Bethany College (WV), Heidelberg College (OH), Hiram College (OH), Marietta College (OH), Mount Union College (OH), Muskingum College (OH), Otterbein College (OH), and Westminster College (PA). The consortium, founded in 1968, is active particularly in pursuing faculty development, facilitating cooperative ventures and informational meetings among administrators and others, grantseeking, and assessing of portfolios documenting college-level learning from life- and work-experience. Two particular faculty development projects, set against the context of previous projects, reflect pragmatic, philosophic, and highly successful cooperation in improving teaching and in clarifying ways of knowing. The projects may be examined both as effective emphases or strategies for faculty development and as important manifestations of shifting assumptions about knowledge.

Thinking Across the Curriculum. The FIPSE-funded **thinking across the curriculum** project which I am about to describe began when faculty members of the East Central Colleges stopped to reflect on the results of a very successful consortium venture into writing across the curriculum. After much pondering, we discovered what was both obvious and problematic: our efforts at teaching writing had succeeded to the point where we could see clearly that most flawed writing was, in fact, flawed thinking. To solve problems raised by our writing project, we decided to design a plan to facilitate thinking across the curriculum.

Several basic assumptions shaped the plan we adopted and implemented. First, we assumed that thinking, like writing, was a complex process and not merely a neat set of definable skills. Second, we assumed that students come to understand this process slowly and after repeated exposure and experience with the process, Third, we assumed that students entered into the process at different stages of cognitive development, carrying with them different understandings of what it meant to think, to learn, to know. Finally, we assumed that lively thought was

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always contextual and relational; therefore, it is best understood in particular disciplinary contexts and in specific thinking environments.

Because of our assumptions, we rejected the notion that students take a course in "critical thinking" or choose from among a list of courses a single course with a special "critical thinking component." Rather, consistent with our process model, we elected to saturate the curriculum with courses consciously designed to foster lively thinking among our students. Our hope was that students would have a variety of experiences with "thinking" in various contexts, under different conditions, and even by different names.

To that end, we applied to FIPSE in 1985-86 for funding to develop a thinking across the curriculum program on each of the eight East Central College campuses.

FIPSE support allowed us to:

--hire consultants
--hold workshops on course revision and the teaching of thinking
--support 120 faculty as they worked in interdisciplinary groups to redesign "regular" courses so as to emphasize the teaching of thinking in those courses
--develop and teach 120 courses, within the various college curricula, which foster higher order reasoning
--undertake a longitudinal study of the effectiveness of a cross-curriculum approach to the teaching of thinking

More interesting than what we have done (design a program for teaching thinking across the curriculum), I think, is how we have done it. We have done it by paying careful attention to three things:

--how students think and learn
--how we as faculty think, learn, and teach
--how people within our area of study learn, think, and know.

To fix this firmly in mind, I have designed what I call "a mantra for the teaching of critical thinking." It goes as follows (and should be chanted with a full breath drawn deep-down, diaphragm deep--repeat five times, each time emphasizing a different aspect of the process for teaching thinking):

I TEACH STUDENTS TO THINK ABOUT AND THROUGH (SUBJECT/COURSE)
I **TEACH** STUDENTS TO THINK ABOUT AND THROUGH (SUBJECT/COURSE)
I TEACH **STUDENTS** TO THINK ABOUT AND THROUGH (SUBJECT/COURSE)
I TEACH STUDENTS **TO THINK** ABOUT AND THROUGH (SUBJECT/COURSE)
I TEACH STUDENTS TO THINK **ABOUT AND THROUGH (SUBJECT/COURSE)**

An explication of this mantra will do much to explain the "how" of our project. To begin with the obvious, it is "I" who teach my students. And "I" have been trained to think in the discourse of a particular discipline: "I" have definite learning style preferences: "I" approach the task of thinking and knowing with a lifestyle shaped by years of experience and experiment. "I" do not come neutral or neutered into the classroom. "I" am a presence and a power in the classroom capable of facilitating or frustrating the thought processes of my students. My awareness of how "I" prefer to think and know, and my ability to articlate how "I" prefer to think and know, will greatly influence whether or not thinking is facilitated or frustrated in my class. To help faculty come to terms with the "I" who teaches, we have used both David A. Kolb's Learning Style Inventory and the Myers-Briggs Type Inventory. From this experience, faculty have come to see how deeply the preferences of this "I" influence teaching style, assignments, and classroom activities (or inactivities, as the case may be).

I **TEACH.** At all of the ECC colleges, that is the center of faculty life. And if the center does not hold .... But hold it can, so long as I take pedagogy as seriously as I take the subject matter that I teach. In our proposal to FIPSE we admitted that our graduate education did not adequately prepare most of us to be teachers. So our project has provided faculty with an opportunity to learn more about teaching techniques and to discuss and share teaching strategies with colleagues from various disciplines. Again we have discovered the obvious: faculty become energized and empowered when and as they find an audience enthusiastic about the nuts and bolts of teaching.

STUDENTS. I teach students. How often I hear colleagues say, "I teach English" or "I teach Physics." Sad sentences those. Empty perhaps? Selfish even? But common. Very common. Yet I do not know very many faculty members who really want to think and know in a room empty of students, however frustrating teaching can be when the learners are present as dense and solid mass. For most of the ECC faculty, graduate school was not a place where "the student" was a topic for discussion. Ideas were at the center of that world. But in any good class, the student must be the center around which thinking, knowing, and learning turn. So, we have tried hard in our project to know more about how students think and learn. To that end, we have explored the work of Jean Piaget, David Kolb, William Perry, Carol Gilligan, and others; and we have used information gathered on such instruments as Kolb's Learning Style Inventory, the Myers-Briggs Type Inventory, and Widick and Knefelkamp's Measure of Intellectual Development. While many models have helped us to better understand our students, the project was focused on the work of William Perry in particular.

The mantra sentence is a very complex one. It deliberately stretches out the sentence so commonly uttered by academics when asked what they do. And because it does so, the last half of the mantra makes clear three very important things about the teaching of thinking. First, thinking occurs in a very complex context: a teacher/learner context, a teaching/learning context, and a thinking/discourse context that is discipline-specific (sometimes even course-specific). **TO THINK IS TO THINK IN CONTEXT.** Different skill sets, different frames of reference, different methodologies, different domains of discourse take center stage as thinking is played out in first one arena of thought and then another.

Indeed, as one moves to the last phrase in the mantra it is possible to consider **THINKING AS CONTEXT.** When I try to lead students into the intricate process of thinking about a poem, I am forced to admit with Marshall McLuhan that the medium is the message. Good thinking in biology will not do over here in a lit class. Neither will good thinking from sociology. The context has changed and my students and I must come to grips with thinking in and as this new context. This is where constant and vigorous study within our disciplines pays off for us as teachers. We are the experts we need when it comes time to articulate for our students the nature of thinking in and as the context and contour of our field. Sometimes, however, we discovered in our project, we neglect to build into our courses both the time and the strategies needed to insure that students learn to "think about and through" our discipline. Rather, we short-circuit matters and just teach "chemistry" or "mathematics." The result is frustration as too few students come to know and appreciate the theory of the discipline that so excites us. Too many students memorize and forget the "materials" we teach. Here our project suggests that, at least in soem key courses in every department, the exploration of the process of thinking in the field must be central to the course. And if we expect very high order thinking in our field, one "methods" course won't do it. Thinking across the curriculum is not only an agenda for the curriculum as a whole, it would appear to be an important item on departmental agendas as well.

I'd like to share some results from our nearly three years of experiment. First, journal abstracts submitted by faculty bear constant testimony to their renewal as teachers and to the empowerment they have been given now that they do more than "teach a subject." Many say that it is by far the best faculty renewal experience they have had to date. Second, the emphasis on who teachers and learners are, and on how they teach and learn has significantly altered the environment in which we teach. When teaching becomes contextual and relational, rather than content-bound, affection touches the learning and thinking process. The result is love: love for each other, love for learning, a love of thinking, and love of the subject matter itself.

Finally, our grasp has exceeded our reach. The goal of the project was to have 120 faculty generate 120 courses carefully redesigned to foster lively thinking. We have not done that. Instead, we have redesigned 200 or 300 courses. Almost all faculty report serious revision of nearly every course they teach. Further, they report serious revision of nearly every course they teach. They report acts of tree-stump evangelism, even in alien fields. Converts have been made. So courses fostering lively thinking are now deeply embedded in the curricula of the East Central Colleges. With them have come significant faculty renewal. From renewal have come new modes of teaching, both affective and effective. And we regularly observe thinking of a livelier sort than we saw before we began our venture.

History of ECC faculty Development and Ways of Knowing. As preceding description has suggested, the thinking across the curriculum project led faculty in East Central Colleges to an epistemological question. We had verged on the question before, though without realizing it in 1973 when through participation in an early FIPSE project on "guided design," faculty discussed the wisdom in giving students room to discover knowledge. The professor was to provide a mapping structure, then move out of the way so that students in groups or as individuals might find their own way to knowledge. We did not question that knowledge was out there, like a pot at the end of the rainbow, and the finder would recognize and appreciate the value of the lode if allowed the thrill of prospecting.

In the mid-70s a Mellon grant helped faculty learn how to advise nontraditional students. When Art Chickering described patterns of development in adult learners for us, we began to think in new ways about students as real people, maybe even about ourselves as real people going through similar patterns of adult growth. Follow-up sessions at the Gestalt Institute in Cleveland invited us to consider the role of perception in the educational exchange, the role of shifting background and foreground. If we had stopped to think about the epistemological implications of the project, we might have realized a blur in the definition of knowledge as a fixed treasure somewhere out there at the end of our course. We were no longer regarding the student as an empty vehicle to be fueled by the transfer of content, nor were we mapping the route for some novice traveller toward a predetermined end. We were journeying with our students as fellow travellers in a mutually negotiated process of communication. Student and teacher were both receivers and senders of filtered and filtering messages that would co-direct the conversation, moving us into experiences that would constitute knowing.

We didn't say all these things to ourselves then. It was later that we became able to describe these new ways of knowing.

Similarly, in the writing across the curriculum project, funded by the Gund Foundation in the late 70s, we verged on epistemological issues but didn't fully articulate them. We knew that if we wanted students truly to know how to write, they needed reinforcement of their skills beyond an introductory writing course. Varied member institutions chose varying means of accomplishing this end: designating courses with a significant writing component, requiring so many such courses for graduation, and so on. In training workshops for faculty in the teaching and grading of writing, we saw some of our colleagues' writing assignments and their sometimes quirky judgments in grading. It was clear that some faculty were better able and willing to make explicit what they considered good writing to be; some could also model that behavior better than others; and some of us knew the eternal and true standards for good writing and others did not. We wished our colleagues the good sense to listen to those of us who knew where these eternal verities were to be found.

We did acknowledge the importance of writing as process--the stages of brainstorming, freewriting, defining focus, gathering data, drafting, revising, getting feedback, and revising. We did not fully explore the possible inseparability of language from knowledge, the community of learners in different classrooms who establish, share, and pass on conventions of language. We did not say that knowledge in one field might be sufficiently distinctive so that one might need to abandon the notion of a gloriously integrated body of knowledge at the end of four years' journey through a curriculum loaded with writing assignments, general studies, majors, and electives. In valuing process and varied contexts, we were nonetheless giving up the definition of knowledge as cohesive object out there; we were conceiving of it as the construct of a community.

Surely, if we were going to give up knowledge as content--knowledge as a product--we should teach the essence of process in context then. That would be--well, maybe problemsolving. But cognitive psychology was calling it "critical thinking." We struggled more directly with epistemological notions now. Instead of ideas, facts, and content, we focused on the context of the classroom and the people in there. When we pressed harder for definition of the essential steps of critical thinking, ECC decided--not without difficulty-- that knowledge had to be further defined only within varied disciplines.

ECC's response to the ultimate epistemological question built into the critical thinking project was pluralistic: no generic and universal process of critical thinking underlies all disciplines. The responsibility for defining critical thinking resides in individual disciplines, or within broad sets of disciplines. For a graying faculty twenty years out of graduate shcool and teaching in small private liberal arts colleges, the problems in identifying such ways of knowing were multiple.

Our teaching loads are heavy. We may teach four different preparations each semester, with independent studies, honors projects, supervision of off-campus internships, Weekend College, advising, committee work, and occasional travel to conferences on top. To publish or to present papers requires heroic effort beyond normal classroom preparation. One is doing well to read current scholarship now and then. Add to these burdens the necessity (and the temptation) to teach as generalists. We venture to "profess" in courses sometimes afield from our graduate school training, as a means of escaping teaching the introductory western civ or the freshman comp course for the fifteenth semester in a row. Scurrying to educate ourselves ahead of the class in the new field, we may or may not come upon the best scholarship to help us prepare lectures, discussions and activities.

Such circumstances lead us to search out course-related scholarship that is readily comprehensible--in terms of our prior training and in terms of tomorrow's or next week's classroom application. They do not incline us toward unfamiliar systems of thought and alien language. Since such ingredients characterize some of the best humanistic thinkers of the 70s and 80s, we may not read them, but rather suspect them of seeking to undermine, even destroy, the fields we love.

Historians probably didn't become historians because they wished to do statistics. Literature and writing profs didn't enter their field intending to do hermeneutics or deconstruction. Some of us hadn't even gotten around to reading Northrop Frye, and we began to glimpse the word "post-structuralism" on an occasional title. Glancing at an article or book on deconstruction, we confirmed nasty rumors about the unreadability and the nihilism of this school of humanistic thinking. We excused ourselves and went on being traditional New Critics (a school several generations old, not "new") and classic storytelling historians.

Humanistic Narrative. The purpose in taking 32 ECC humanists to Princeton for "Dual Workshops in Humanistic Narrative" for four weeks, sponsored by NEH, was to gather some coherent sense of the furor in current scholarship. In the moments when we dropped defensive posturing, we admitted that our own self-respect required basic grounding in new ways of knowing about narrative in history and literature. We hoped to apply appropriate insights and methods in one course per participant.

In the first week the focus was on philosophic orientation to the debate about narrative. A classic text by Herodotus provided a lens for our study, with Robert Scholes from Brown University and Rufus Fears from Boston University leading the literature and history institutes. Fictional technique makes the difference between a chronicle and a history, we learned. Nobody much values the chronicle's mere facts: "a" happened, "b" happened, "c" happened, "d" happened. Instead, a historian groups such events, embellishes them with description and character and interpretation--with meaning. The reader helps create these meanings, too, because words carry associations from other contexts, and the writer uses those associations, often consciously. Reading and writing history are mutually creative processes.

In the second week, with Jerrold Seigel of Princeton University and Wallace Martin of the University of Toledo, we glimpsed the parallel structuralist assumptions of Ferdinand de Saussure's work in linguistics and Claude Levi-Strauss's anthropology. Later that week we read Michel Foucault, Hayden White, Teodor Todorov, and Roland Barthes. This extrememly challenging and unsettling week was the crux of the institute. As words became signs and texts became codes, we began to wonder what we knew through literature or history and how we knew we knew it.

During the third week psychoanalytic narrative and its relation to history and literature were presented by Claire Kahane of SUNY's Center for the Psychological Study of the Arts at Buffalo and Peter Loewenberg of UCLA, with special attention to Freud's Dora. We explored a multitude of storymaking psyches--Freud, Dora, the Victorian culture, contemporary psychoanalysts, and ourselves. We considered new foci for stories of the psyche--the mother rather than the father, the shaping influence of experiences beyond those within the family, the psychological makeup of historic individuals, language as the center of identity. We considered the historian's or the literary critic's obligation to confess the nature of his or her own psyche as coloring the interpretation either might write.

In the fourth week we considered Afro-American oral tales, recognizing the complex six-part structure that patterns most natural narratives. Focussing on performative context for the tales in Zora Neale Hurston's Mules and Men, we discovered once again blurred boundaries between science and art, history and fiction, anthropological document and novel. Patrick Mullen of Ohio State University and Trudier Harris of the University of North Carolina closed the dual workshops.

Assorted applications to the undergraduate classroom followed.

Because the workshops in narrative examined writers' uses of time--where does it slow down? speed up? and what is thereby emphasized or omitted? how does the reader fill in the missing content?--the seminars began to talk about "ghost chapters" (the phrase was Robert Scholes'). Several participants went back to campus asking their students to write missing background incidents or outcomes for a given short story. Imaginative responses gave students permission to enter the works, to make them theirs. Discussion of the ghost chapters gave students and professors new ways to compare their sense of characters, their preferred types of storyline. Several participants in the workshops had their students write journal entries while reading before class or had them "talk aloud" in diads during class discussion.

Professors recognized, more than ever before, that to comprehend the story being told by author or filmmaker, a reader/viewer must anticipate incidents about to unfold. A reader predicts, then tests and adjusts that preconstructed storyline against the one the writer writes. The writer has perhaps experienced some like process--forecasting in the mind, then drafting and revising. Whether writer and reader ever exactly meet in the text is probably unknowable--a given text is multiple, taking on different meanings for different readers or even for the same reader. The reader makes her own story from the one the writer wrote. Having students write, talk about, compare the stories they are making from "the" story helps jostle the interpretive process into some reasonable parameters.

Other professors found applications of the six-part structure of natural narrative in a Hemingway story, for example. One found a new approach to Huckleberry Finn--how would the story be different told from his point of view? What has been omitted that he would include? Another found a similar focus on what is usually omitted--the woman's point of view in Between the Acts by Virginia Wolff. Other faculty began to see how and what they might teach in Jorge Borges, John Barth, Don Quixote. One restructured the second half of a two-semester survey of American literature--subtitling it "The Crack-Up of Narrative." Historians began to recognize their own storytelling role in the classroom. They considered using classics from Herodotus or Tocqueville, the likes of which they had previously thought unteachable for today's students.

Collegiality within the consortium was enhanced because faculty exchanged inter-campus lectures. Nearly all scheduled visits to lecture in a colleague's classes or to meet in an all-college forum. To date, two-thirds of these lectures have actually happened. The pleasure of being hosted is unusual for most ECC professors--they are more accustomed to hosting. A boost in morale and real friendships have followed. The evaluative weekend workshop, scheduled for April 1988, was fondly described as a "reunion" as well as a serious working session on deconstructionist theory of narrative in history and literature.

Additional impact from the workshops was scholarly. One participant was researching a biography while at Princeton and appreciated the heightened consciousness of his combined role as novelistic dramatist and historian. Another decided to undertake a major life-review oral history project, in part, because of consultation with Patrick Mullen. Several took sabbaticals in the year following the workshops and found the narrative study relevant. A music professor constructing an interactive text in appreciation of world music saw parallels between the structuralist approach to literature and the cross-cultural/ahistorical analysis of aspects of music she was attempting. Another intends to utilize Geertz's technique of "thick description" in research and teaching of theatre history. A poet reconsidered his usual habit of excising autobiographical references in his poems.

Even consultants indicated impact on their scholarship. Claire Kahane now teaches a graduate course on psychoanalysis and narrative. Patrick Mullen intends to write on narrative structures in Mules and Men. Wallace Martin is continuing to work with East Central Colleges in developing subsequent activities explicitly addressing ways of knowing. A series of programs, each repeated on several of the ECC campuses, in being discussed for 88-89, to be called "The Opening of the American Mind." Bloom's The Closing of the American Mind is the beginning point for each program, particularly Bloom's complaint that American educators are not teaching the life of reason, the life of the soul. The life of reason--as described by Plato, Kant, Nietzsche, and Dewey--will be examined to see how Bloom's reading of the holds up. The concern for study of philosophers emerged from the study of narrative theory when ECC faculty realized the necessity to know especially the continental tradition better.

A further aim is to bring together 20-25 cross-disciplinary faculty to study current anti-epistemological philosophers, Richard Rorty being chief among them. Like much of the American public who have bought Bloom's book and Hirsch's Cultural Literacy and who follow Bill Bennett's well publicized attacks on educators, the faculty of East Central Colleges are concerned about ways of knowing. They actively seek to make themselves well informed discussants and teachers of ways of knowing within their fields.

THE RELATIONSHIP BETWEEN FACULTY STRESS AND PROFESSORIAL STYLE: DO COMMITMENT AND NON-TRADITIONAL TEACHING METHODS LEAD TO STRESS?

Honey W. Nashman
and
Carol H. Hoare

Abstract

This paper explores the relationship between faculty stress and professorial style in the university environment. It includes background data on the escalating rate of change and attendant stress, dominant faculty stressors, vulnerable personality types and non-traditional teaching methods as potential sources of stress.

INTRODUCTION

It is clear that "stress", as experienced and reported by diverse experts and "stressed" persons, is uniquely individual in causation and manifestation. Tension and stress are felt within the person and interindividual variation is extensive enough that current efforts to systematically define, classify and explain stress, in a way that explicit correlational or causal models will result, are elusive. This caveat stated, it is notable that the pace of contemporary life, with concurrent heightened expectations for increased productivity, has been associated with an increased incidence in the number of persons who report stress, talk about stress, engage in stress-management workshops and seminars, and seek professional help for stress-related symptomatology.

If modern life is to blame for an increased stress "load", we can thank Alvin Toffler for first acquainting us with its societally-associated essence. It was Toffler (1965) who coined the term "Future Shock" to describe the escalating rapidity of socio-technological developments and the disorienting personal effects produced by such change. Since Toffler's analysis in the mid-sixties, it appears that the pace of life has quickened even more so. Contemporary professionals frequently express the belief that they cannot catch up, keep up, or perform effectively in the multiple roles required of them.

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The human effects of this dramatically quickened and pressured existence are now chronicled in an extensive body of literature which supports the theory that human biological systems function at a pre-set rate and pace, and can only exceed imposed requirements for "more" and "faster" to certain finite limits without exhibiting physical and/or psychological problems. Writing in the "Adulthood" issue of Daedalus, Katchadourian (1976) explains the increasing rash of stress and psychosomatic illness in Western society as end products of a clear societal/individual dysjunction. To that author, the artificially set pace of life in the industrial world is out of synchrony with basic human metabolic rhythms (p. 51).

WORK AND STRESS

In the past decade, the "stress" literature has documented the interactive effects of specific personal characteristics which predispose persons to vulnerability to stress, conflicting professional and personal role demands, and role proliferation in stress causation. Most recently, however, research has focused more specifically on work variables and job stressors as dominant inciting factors. Demands for continual updating of knowledge in an environment of rapid knowledge obsolescence, and requirements for ever-escalating productivity in multiple and frequently conflicting job roles, have been associated with numerous symptoms and signs of stress.

Role "proliferation" and role "overload" are job facets which have been indicted most frequently as agents which show a correlation with the inception of deleterious human stress cycles. Effects are seen in the phenomenon of burnout and in physical and psychological symptoms which result in exhaustion and illness. Schaef and Fassel (1988) have gone so far as to describe today's work environment as a contemporary form of a new addiction, one in which work itself becomes a socially accepted form of abusive substance to which employees readily become habituated in their climb toward higher levels of success. Responsible adults are subtly reward-reinforced into acceptance of a corporate culture which engenders workaholism and norms employees to become addicted to their jobs.

FACULTY STRESS

Despite a prevailing notion that academics live in an insular ivy space of contemplation, scholarly pursuits, and protective detachment from the maelstrom which characterizes the "real" world, the once societally-removed enclave of academe is now largely another form of demanding, corporate culture. Faculty are no longer exempt from stress-inducing pressures. The professor of yesteryear was expected to maintain currency with his/her discipline, prepare for classes, advise students, contribute to curriculum development efforts, attend departmental, school and university committee meetings, provide community service, engage in research, publish in acceptable journals, and present papers at national conferences.

Today's professor is expected to manage all of these but with the added burden of contributing to efforts which will help to sustain or fatten institutions' budgets. With the annual inflation rate of a collegiate education escalating exponentially and a dramatically constricted pool of traditional college-age applicants, threats to institutional survival are felt and attention to the "bottom line" haunts academics as never before. Increasingly, requirements for grant generation, project administration, program marketing and student recruitment have found their way into the burgeoning array of activities which define the typical faculty role. Failure to produce adequately, to, in effect, resist becoming suitably addicted to the proliferative work requirements of the collegiate organization results in alienation from dominant cultural norms. For those who are unable or unwilling to become work-role addicted, negative reinforcers are instituted in the forms of exclusion from the rewards of personal approval, denial of tenure, lack of advancement and absence of salary increments.

In describing the fragmentation and stress that result from expectations to perform in more collegiate roles more quickly, Seldin (1987) has indicated that a veritable "juggling act" results and that little time exists for doing things well. Scant hours remain for personal and family needs, and the resultant daily experience of pressure, frustration and stress accrue. As is true for other forms of demanding corporate roles, a number of recent studies of faculty overload and stress indicate that the faculty member of the eighties is burdened with too many disparate tasks to do and too little time in which to accomplish each (Sorcinelli, 1985; Gmelch, 1984; Peters and Mayfield, 1982).

VULNERABLE, AND NOT SO VULNERABLE, FACULTY STYLES

Although some assume that professors are less vulnerable to becoming enmeshed in stress inducing patterns of work because of their intelligence, the data indicate this assumption to be incorrect. In fact, the reverse seems to be true. It has been demonstrated that people who suffer from stress and burnout are usually high achievers who are among the most competent and committed professionals -- those who feel strongly about the value of what they are doing and who sincerely want to do an excellent job. Based on data from the National Faculty Stress Research Project which obtained self-report data from 1,920 faculty members nationally (response rate=75%), Gmelch (1984) indicated that 60% of the respondents reported that the most significant stress in their lives came from the work sphere. High expectations for self topped the list of stressors, followed by demands for obtaining financial support for research. It appears that faculty may have bought into unrealistic expectations for their performance based upon established institutional (cultural) norms which foster such expectations.

A factor which is seen as influential in the self-infliction of certain forms of stress is that of the professor's teaching style and behavior. According to Farber (1983), frequently cited attributes of high quality professors include sensitivity, responsiveness, criticalness and a holistic approach to education. We know that the manner in which students experience their professional training -- the acquisition of skills, attitudes, and expectations--is related to how they fare in the world of work. However, we know somewhat less about the effects on faculty of their own teaching styles. Is it more or less stress-inducing to function in a caring, giving and responsive manner? Are faculty members who are committed enough to teach in an applied and non-traditional style more or less likely to suffer deleterious, stressful effects?

The attendant literature reveals little on the topic. Wilder and Plutchik (1981) identified and compared nine faculty types in their assessment of the adequacy with which faculty prepare students for their eventual work roles. Acknowledging that there are no "pure" types, and that each faculty form has positive and negative effects on students, the authors categorized faculty performance into nine dominant forms or types. Of note is the fact that only two of the faculty types (the "Realist" and the "Professional") were clearly associated with prevention of burnout in students.

But what of the association between professorial and teaching style and the likelihood of work-related stress among faculty? Field-based observations conducted by the authors indicate that faculty whose teaching styles are tailored to students' needs are more likely to invest more in the teaching role and to manifest more strain as a result of such investment. As Menges (1981) indicates, good teaching is "...the intentional arrangement of situations in which appropriate learning will occur" (p. 556). It is clear that this is not effortless teaching. However, our data also indicate that faculty who tend to work towards effective teaching, who select instructional strategies which augment desirable learning outcomes, and who select methods and strategies with clear relevance to content and learner level, are the faculty who achieve a high level of satisfaction with their teaching performance. Are they, therefore, more susceptible to stress? Preliminary data in our exploratory study indicate that the converse is true. Such faculty exhibit the qualities of control, commitment and challenge. In another context, the first three factors have been labeled "psychological hardiness" by Kobasa (1979). This triad tendency is characterized by the following personality traits:

1. The belief that they, as individuals can control, or influence, the events in their job lives;
2. The ability to feel deeply involved in, or committed to, the activities of their professional and social lives; and
3. The anticipation of change as an exciting challenge which will be productive of further individual development.

Our analysis reveals the importance of adding one important fourth dimension, which we term "connectedness":

4. The tendency to employ social support "connectedness" with others, both in and beyond the work environment.

The importance of social support as a buffer against burnout has been emphasized by several authorities (Hitz and Roper, 1986; House, 1981; Freudenberger, 1985, Greenberg, 1984; Pines, Aronson and Kafry, 1981; Quick and Quick, 1984). Connectedness, or social support, might occur in the form of an institutional support system or a support system found through an association. In either case, the dual functions served by such a system are those of interpersonal support and collaboration as well as encouragement of individual growth and development. Gilligan (1982) indicates that individuals who are unconnected, who function without adequate social support mechanisms, are in danger at all stages of life and their survival has been demonstrated as being at risk. Recent findings regarding the higher survival rates among cancer patients with spouses as compared with patients without spouses give credibility to the essential nature of support systems.

CONCLUSION

There are scant signs that the pace of life will slow down, and heightened stress in the work world appears to have solidly taken up residence and is here to stay. In academe, the near term future will probably be one of escalating stress, particularly as inflation erodes the percent of institutional budgets which are given over to instructional costs and productivity expectations for fewer faculty are then heightened. It is also likely that many faculty will suffer from an inability to cope effectively and that the professoriate will manifest increasing signs of the deleterious effects of working in an environment where role proliferation and job overload are the rule and the corporate environment seeks only to foster dependency on work-oriented rewards.

However, the unrealistic expectations implicit in many contemporary academic environments need not force faculty into powerless acceptance of heightened work stress as the status quo. Data from the literature and from our exploratory study indicate that "psychological hardiness" can result in personal resistance to the harmful personal effects of stress. The four personality traits included within the "hardiness" model include control, commitment, challenge and connectedness. While certain persons are more likely to possess these traits than others, an increasing awareness of the importance of these trait-mechanisms in warding off the potentially negative effects of stress should empower academics to foster a collegiate environment that is a breeding ground for positive, healthy change instead of one that passively receives and accepts the destructive harm that work-related stress augurs for us all. As we race into the future, cycles of unrealistic expectations can be broken and replaced with environments and expectations which foster health and academic success.

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PROGRAMS WHICH BRIDGE THE GAP

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Kutztown University is one of fourteen universities comprising the State System of Higher Education in Pennsylvania. Like many other institutions in state systems, it traces its origins back to a Normal School. As the needs of society evolved, so did the institution--to a teachers college, a state college and finally a university. Throughout its history, the institution's primary purpose has been the education of traditional, college-aged students. Within the last ten years, however, Kutztown University has begun to see a change in its student population. There is an increasing number of non-traditional students enrolled in the various curricula of the university. At the present time, non-traditional students (defined as those over the age of twenty-five) account for twenty-five percent of the 6,200 students enrolled at the university.

As a typical, traditional institution of higher learning, the university has responded to this new clientele in a typical and traditional manner--normal daytime activities have been extended into the evening. After all, what works for traditional students during the day should also work for non-traditional students during the evening. Ever so slowly, we are beginning to see the need for developing new and different patterns of organization, new methodologies and new content suited to the mature level of adult learners.

Although it has been difficult to introduce change and to overcome barriers associated with traditional institutional values, two adult-oriented educational non-traditional programs have emerged at our institution. These programs are the RN upper-division nursing program and the General Studies program.

RN Upper Division Nursing Program

That nursing education is in a state of flux is an understatement. At this time, nurses may gain entry into professional practice through RN diploma programs, associate degrees in nursing or baccalaureate degrees in nursing. All three of these educational programs prepare students to sit for the RN license.

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Because of the great number of non-baccalaureate programs in Pennsylvania, Kutztown University has developed an RN upper division program for registered nurses. Due to the special nature of this program, all of the students pursuing this degree are essentially non-traditional students.

Developing a professional program that conforms to the academic rules and regulations of a traditional institution as well as the requirements of an accrediting body was not an easy task. In fact, it was accomplished only through blood, sweat, and tears. I know because I have been there.

The first major obstacle that had to be overcome was to design a program that complied with the accrediting body's requirement that the baccalaureate program prepare a nurse generalist. Doing this for students who are already professionally licensed and generalist prepared was not only difficult, it was downright challenging. The next obstacle was to convince a traditionally-minded liberal arts faculty that testing knowledge acquired in lower division courses not taught at the university was valid and educationally sound. Once again, a task that was not easily accomplished.

The curriculum for the program is grounded in liberal arts education and expands basic nursing knowledge acquired through previous education and clinical practice. The program requires sixty-four credits in general education, fifty-one credits in nursing courses and seventeen credits in liberal arts and sciences courses.

Since nursing students all have previous knowledge and clinical experience, students are encouraged to challenge as many courses as they can. Typically, students from diploma programs challenge the basic sciences, psychology, sociology, and other disciplines. In addition, these students acquire twenty-three credits through challenge examinations for nursing theory previously acquired in the lower division. Thus, students from diploma programs without collegiate credit can obtain a minimum of forty-three credits. Many students routinely acquire more. Associate degree nursing students transfer all their collegiate credits and apply them to their degree. These students routinely receive sixty-four credits towards their baccalaureate degree requirements.

The innovative part of the curriculum is present in the nursing courses. Because of their previous knowledge, these students must be presented with curricular content that is both challenging and non-repetitive. This is accomplished by presenting nursing content, appropriate for generalist preparation, that emphasizes skills not realized in previous nursing education. To achieve this end, the curriculum emphasizes nursing skills acquired outside of a hospital setting. Disease-caring skills have already been acquired and mastered through the previous learning of non-baccalaureate nursing students. Clinical assignments also reflect non-disease orientation. Students practice nursing skills in community agencies, with families, and in hospitals functioning as supervisors rather than bedside nurses. In addition, students are given opportunities to make decisions in clinical placements since they are licensed professionals. Students may also negotiate clinical experiences to expand their knowledge base and professional practice.

The method of instruction is also an innovative part of this curriculum. Classroom techniques used are reflective of those advocated for adult learners. Thus, lecture-discussions, simulations, role-playing, seminars and student presentations are the primary methods of instruction. Faculty members, in this curriculum, see themselves as facilitators of learning whose purpose it is to create an environment that is conducive to learning.

The nursing program bridges the gap between diploma and associate degree professional education by allowing non-traditional students the opportunity to validate and/or credential previous learning, build upon prior knowledge, expand professional practice, and increase career mobility. By achieving these ends, the nursing program allows this special group of goal-oriented students to achieve their baccalaureate education without unnecessary duplication of previous knowledge and within an environment that promotes adult education principles within a traditional institution advocating traditional education principles and practices.

General Studies Program

Non-traditional students are characterized in part as being highly motivated and goal-oriented individuals. Those of us who have experienced teaching and guiding these students can attest to these qualities in non-traditional students. Since these students frequently have educational needs related to their current employment or job mobility, traditional, undergraduate programs of study are too inflexible and inappropriate to these needs. The student who is a manager or supervisor, for example, has already developed management skills that are presented in basic management courses on the undergraduate level In addition, students with such experiences have also mastered basic competencies presented in introductory courses in psychology and sociology, for example. As a result of these experiences, traditional undergraduate programs may not be appropriate for these students.

A great majority of these students are typically attracted to the General Studies program. This program is designed to promote the philosophy of liberal education and also to incorporate investigation into areas of learning not available in the more traditional majors within the college. Thus, the program allows a flexible combination of courses from numerous disciplines which is unified by a central theme or topic that warrants interdisciplinary study.

The General Studies program, which encourages economical diversification, is ideal for non-traditional students. With their extensive experiential learning and training, non-traditional students already have a topic or topics around which to develop a multidisciplinary major of study. Courses within this program of study will supplement and develop further their experience.

Students enrolled in General Studies must complete sixty hours in general or liberal education. The major in General Studies must contain fifty hours in liberal arts courses. Of these fifty hours, twenty must be in one discipline and represent the theme or topic. Thus, thirty hours within the major can supplement the theme. In addition, students complete eighteen hours in electives.

Non-traditional students frequently elect this program because of their needs and motives for further education. Because of their work experience and career goals, they have a clearly developed theme or topic upon entering the program. In addition, they have a well-developed rationale for the supplemental courses they need to support their theme or topic.

The program is administered in a manner that is supportive of non-traditional students. Students who enroll in this program must clearly define their educational theme, support courses and a rationale for these in a written prospectus to a General Studies Committee. The committee consists of one faculty member each from the humanities, the social sciences, and the natural sciences, and also the Associate Dean of Liberal Arts and Sciences. The members of the committee work closely with students in order to develop an educationally sound rationale and prospectus. This is especially significant since courses listed in the prospectus will be those required within a student's program of study and any substitution of courses must be approved by the committee.

Another aspect of the General Studies program which appeals to goal-oriented students is the requirement for either Independent Study or Internship. Such courses afford students the opportunity to develop special interests or projects which are directly related to their career goals. For instance, an Internship experience will allow a student the opportunity to evaluate and develop professional skills, to integrate theoretical knowledge with practical experiences, to evaluate career goals, and to evaluate strengths and weaknesses in terms of employment and career mobility.

Successful Graduates

The General Studies program has a number of examples that illustrate how the program can meet the needs of adult learners. Some particularly interesting cases will be presented.

The first is that of Mrs. E. She entered the program as a registered nurse with an associate degree. Before receiving her RN and associate degree, Mrs. E. was a licensed practical nurse. The program Mrs. E. designed centered around her nursing skills. These were supplemented with courses in social welfare and Spanish. These were selected because Mrs. E. wished to start a career in elder care. Knowledge of nursing coupled with social welfare and Spanish would assist her in caring for the elderly as well as being an advocate for them. Mrs. E. completed her program of studies and graduated with honors. In addition, she was honored as the oldest person to graduate from the university. This was accomplished by Mrs. E. in her 75th year. Since her graduation, she has completed volunteer work with the poor in Jamaica and is now pursuing her master's degree in counseling psychology.

Another example of a program success is that of Joe. Before entering the program, Joe had completed two years of college as a biology major. He left school and entered the navy. Upon his discharge, he went to work for a large company where he worked in environmental pollution control. During his employment, he was promoted to a management position and was encouraged to complete his baccalaureate degree.

Joe designed his program around his biology knowledge and his need for management skills, computer literacy, and environmental issues. He constructed a program that incorporated courses in management, accounting, economics, basic programming, COBOL, conservation, and land planning. His program also included an Independent Study in which he developed a participatory management program. Joe graduated from the program and has assumed a managerial position in his company.

Other successful examples include a student who entered law, another who became a free lance researcher for film producers, a language specialist for an international business, a resort manager, and an athletic trainer. All of these students developed these programs around a career goal which required specialized knowledge from a number of disciplines. No other major at the university offered such a combination of courses.

Students who enroll in the nursing program tend to stay within the nursing profession. Therefore, examples of student successes are limited to cases of career mobility in the nursing profession. Graduates of the program have entered graduate school and medical school. In addition, students have assumed management positions in hospitals, medical centers, nursing homes and public health clinics. Some have also become nursing faculty members. These students were able to take advantage of career opportunities because of their baccalaureate degrees without repeating the basic nursing knowledge gained in their previous education.

Bridging the Gap

Why have these programs become so popular with non-traditional students at our institution? Perhaps the most obvious answer is that out of all the programs available to non-traditional students, these programs are the most relevant to their needs. There are other answers which I feel are also important and which I would like to mention.

In the book, Enhancing Adult Motivation to Learn by Raymond Wlodkowski, a number of characteristics of successful and challenging programs for adult learners are discussed. Some of these characteristics which are incorporated into our programs are:

1. Learning opportunities are provided for responsible attainment of knowledge and skills.
2. Opportunities are provided for allowing learners to realize their accountability for learning.
3. Situations that remove uncertainty and emphasize the importance of goals are part of the educational experience.
4. Opportunities are provided for self-directed learning.
5. Opportunities are provided for students to select topics, projects, and assignments that appeal to their curiosity, sense of wonder and need to explore.

Conclusion

In this brief discussion, I have presented two programs that are meeting the needs of our non-traditional learners. One program is explicitly designed to meet the career goals of a select group of students. The other was a multidisciplinary program which met the needs of adult learners with varied backgrounds. Although this program was originally designed for the typical undergraduate, we discovered that the majority of these students did not have the maturity and motivation to design a program that was related to specific goals. This level of maturity appears to be acquired through experience and the need for self-actualization that is characteristic of adult learners.

Since non-traditional students now represent an ever increasing component of the student population, the university must begin to adjust to the needs of these students. The knowledge gained from developing the Nursing and General Studies programs will be invaluable in the development of future nontraditional programs.

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PACE BLOCK XIV: LABOR & ECONOMICS: AN EXAMPLE OF NON-TRADITIONAL & INTER-DISCIPLINARY EDUCATION FOR ADULTS

Mary-Curtis Browning

With college enrollments shifting from the "traditional" 20-year-old to adults of 25 and older, many colleges and universities, especially those in urban areas, have had to answer some difficult questions:

> How do we attract older students and keep them?
> Do we offer them the same traditional scheduling?
> As evening students, must they struggle with limited evening class schedules?
> Do they want only "business" degrees or might we offer them liberal arts programs?

The Program for Adult College Education (PACE), at the University of Missouri-Kansas City, has answered most of these questions. It attracts working adults, first, because it offers evening and weekend courses, but UMKC offered these before PACE began, seven years ago. PACE put a new twist on this, however: its students can carry a possible full academic load yet attend class only one evening per week and one weekend per month. Thus, a person with no previous college credit can earn a Bachelor of Liberal Arts degree (B.L.A.) in five (5) years or less, as opposed to the ten (10) years it often takes with traditional evening courses.

Do working adults want liberal arts degrees? Most do not, at least not at first. Their first idea is to get "some kind of business degree," though they are very vague about it. Others do not care what courses they take; they simply want "that piece of paper" which guarantees them access to a certain job level. They accept the liberal arts curriculum of PACE because they want to finish quickly; however, for those who want business courses, or need them to satisfy an employer who reimburses only for "applicable" courses, the B.L.A. accommodates them by allowing thirty (30) hours of non arts and science electives. This also aids those who transfer into the program with non-arts and science hours, recent or old.

They stay with the program because they can see degree completion in a reasonable length of time. They stay, too, because they grow to love learning; they would not trade their liberal arts curriculum for any other. And they stay because the large blocks of time they spend with instructors and fellow-students provide a community, a closeness other commuter students do not achieve.

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Incidentally, this young program has added some zest to the College of Arts and Sciences by bringing over on-hundred (100) students into its population. The Bachelor of Liberal Arts program, ninety-eight percent of which is PACE, now ranks as the fourth largest "major" in the College. This has helped quell misgivings some faculty had about the program; the caliber of faculty who have agreed to teach in PACE and have them promoted it wholeheartedly, has also helped. Only those faculty members willing to break away from traditional thinking and scheduling have come into PACE; they stay because they enjoy working with adults who have a firm commitment to learning and who bring intellectual curiosity to the classroom, not to mention valuable life experience.

UMKC did not invent this program. It began in Detroit as TEP (To Educate the People), a co-effort of unions and Wayne State educators to offer a degree program to automotive workers. Why they chose the liberal arts, I am not sure, thought I recently heard a fascinating defense of such study by a union leader, at a conference in New York City. A community college in the Kansas City area adopted the Wayne State model, but called it PACE. As their early enrollees earned associate degrees and wanted to continue their education, the community college asked UMKC to begin an upper division segment of PACE.

Instead, the university instituted a four-year program, so that, in one sense, we compete with the community colleges; in actuality, three-fourths of our students are upper division -- many of them graduates of the community college PACE programs, in the area. In addition to offering the upper division, our program differs from that early model in not including a television course in every block.

PACE offers students "blocks" of twelve credit hours, each block containing three four-hour courses; each block of courses carries a theme, so that the courses have a natural connection and reinforce one another. Themes--also block titles--include: "Myth and Meaning," "Birth to Death," "American Culture," and "Labor and Economics." The first course listed in a block is a modified independent study; it is "modified" in that instructors will allude to it during one of the other two course, may include its material on exams, may even set aside some time to lecture on it. In the original model and at the community colleges, this is a television course; schools pay for air time in early morning to run the Wayne State video tapes. Students watched them before going to work, until VCR's became affordable. The second course meets one evening per week for the semester; the third meets four weekends during the semester, roughly once a month. We count contact hours carefully; the evening class meets for four hours. The weekend course meets from 6-10 p.m. on Friday, 8-5 on Saturday, and 1-5:30 on Sunday.

The weekends may sound brutal; they are very tiring, but the long hours together also help create the camaraderie that has added to the success of PACE. Unlike traditional evening students, these people feel pride in their program, bring their friends into it, stay with it until graduation, and nag us about starting a master's program.

Blocks I - V contain the "core" requirements; students must either take them or transfer equivalent courses. Blocks VI - XIV are elective; students may choose whatever suits them in this sixty hours, but must complete twenty-one total hours in each division of the liberal arts: the humanities, the natural sciences, and the social sciences. This year we have also added two, four-hour summer blocks.

Block XIV: Labor and Economics will serve as an example of how PACE works and show the interdisciplinary nature of the curriculum, as well as some non-traditional media use and the coordination so necessary among faculty within a block. Though a few blocks have a single instructor, most have two or more; one block has five. Most blocks use faculty and non-faculty experts as guest lecturers; all blocks use film, videos and other media to break the four-hour stretches of time and to take advantage of these valuable learning aids, too time-consuming to use in regular fifty-minute classes.

When I took the job of PACE Coordinator, the newly-conceived "Labor/Econ." block lacked an independent study segment; the Chair of the Economics Department and the Director of the Labor Institute had agreed to teach the social science portions. Though their courses all had economics designations, the weeknight course would cover the history of the labor movement, while the weekend seminars would cover laws, formulae, and other "hard" economic elements which impact working people's lives.

The Director of PACE, an associate dean in the College, felt the block needed a humanities element, a course that would look at the lives of working people through literature and film, perhaps. He and I came up with "The Culture of the Working Class;" all I had to do was create the course. To one who had spent the last five years as an adjunct to the English Department, teaching composition, it as an exciting assignment.

On a course list/schedule, then, the block looks like this:

BLOCK XIV:	Labor & Economics	12 hrs. upper division
Hum 404P	Culture of the Working Class (Independent Study)	4 Hum. hrs.
Econ 438 Econ 395B	Economic Policy (2) Economics of Law (2) (weeknight class)	4 Soc. Science hrs.
Econ 486 Econ 395B	Labor Economics (2) Economics of Poverty (2) (weekend course)	4 Soc. Science hrs.

This block illustrates an anomaly even for PACE: the Economics Chair likes to teach in PACE, but refuses to create special four-hour courses for it; instead, he pulls regular ones from the catalogue to fit the PACE schedule. Often these upper level courses have topic flexibility, determined by the expertise of the instructor or the topicality of a given issue. Whatever the course titles, those two weeknight listings amount to a History of the Labor Movement.

With a course title and some vague ideas rattling around in my head, I began to create a course. It took me six months, but I was also new at the coordinator's job. Still, creating new courses takes time and work; that's one reason some faculty will not do this sort of thing.

Some literary works jumped into my mind: novels like Dicken's HARD TIMES, Upton Sinclair's THE JUNGLE, and even Dreiser's SISTER CARRIE, as I realized that three-fourths of PACErs are women. With movies I began with more current ones such as "Norma Rae" and worked backwards to "Hester Street" for a look at immigrants. I had to do some research before I came up with "Heartland" as representative of rural life and farm work, in the early 1900's. Once these longer selections began to frame the course, I started looking for shorter pieces: short stories, plays, poems, even songs and paintings.

No canon exists, of course, for such a topic, but the amount of material I found forced me, early on, to narrow my topic. Deciding on a definition of "culture" helped me set some parameters. After my first meeting with my two colleagues, I decided to partly develop my syllabus on capital "C" culture; I would use only fiction, only what might be termed "entertainment." My colleagues, old hands at the labor topic, tossed me all sorts of suggestions; their reading backgrounds in the field impressed me, but also made me aware that they could handle the documentaries and the non-fiction pieces better than I.

They liked my tentative list of films and novels, even the Dickens one, since they also planned to dip into European roots, to introduce their courses, though we all planned to deal mostly with the U.S. Using HARD TIMES led me to a media I might not have used. I had finally chosen an American Literature text as a convenient source for many of the shorter pieces I wanted, as well as for the expository text which connects eras and provides the material about authors and their times. An anthology of American Literature has nothing on Charles Dickens, however, and I had too little time allotted me in the classroom to lecture on the needed filler. So, I made an audio tape, a 30-minute talk about Dickens as a child laborer, about his novels' being published serially and actually read by working people, and about the advent of magazines, as an important element of working class culture.

The students appreciated it; they could play in in the car going to work or listen to it as they ate a brown-bag lunch. These students have very little spare time, so truly appreciate faculty efforts to use their time wisely. Instructors in a program like PACE must think differently, then, think non-traditionally.

I approached my entire course non-traditionally, in that all the emphasis lay in the subject matter of the genres; though I used novels, short stories, poetry, drama, as well as paintings, films and printed folk/work songs and pop tunes of the times, I did not talk about art forms nor the structure of any particular genre. Selections made it onto my syllabus based on their availability to the working class of their era and/or the impact they had on how people perceived working people. Only a few got on the list because they simply showed living conditions of the time better than any other available. source.

Once I had a tentative list, the labor institute fellow and I met to coordinate written assignment due-dates, and, to some extent, their content. His largely involved summaries of and reactions to assigned articles and to the films and film-strips he showed on early history. In the later eras, however, he emphasized tying students' own family histories into the historical material whenever possible. My writing assignments involved syntheses of elements within my course work, but on all but the essay exams, students could draw from the material in the other two courses.

One of the first film-strips he showed concerned labor problems which caused Europeans to immigrate to this country and some of the problems they discovered when they arrived. The week after they had listened to my audio tape telling of terrible living conditions prior to industrialization--such as peasant/farm laborers living in lean-tos or huts with dirt floors, for instance--his filmstrip showed the terrible conditions of the Irish famine, which drove those people to the U.S.

While they were reading HARD TIMES for me, about factory workers' lives in the early days of the Industrial Revolution in England, he and the weekend instructor lectured on conditions in the early cotton mills in New England. The first weekend's economics course also delved into the basic concepts of labor supply and demand, an overview of the theories of labor economics, the collecting of statistics, and the actual math and graphs involved in charting wage theory.

From this, students moved, in all three course, to what occurred economically and culturally as waves of immigrants descended on our cities. While they read Upton Sinclair's THE JUNGLE, (the muckraking novel which provoked a government investigation of meat packing and the passage of the Pure Foot Act and which detailed the grim lives of mid-European immigrants in Chicago at the turn of the century), they heard in the weeknight class about the Homestead Strike of 1893 and

Teddy Roosevelt's intervention in the coal strike of 1903. Meanwhile, their second weekend seminar covered management and the division of labor; education, workers and industry; and the design of the work place.

This latter topic tied into my course, then, when they watched Charlie Chaplin get caught in the gears of machines, which began to dominate factories and set an inhuman pace for workers. Besides the feature fils students viewed in my"Culture . . . " course, they saw AFL-CIO films like "Tea Party Etiquette" in the evening class and "Rosie the Rivetor" on the weekends.

At other times during the semester, students might read "Waiting for Lefty" for my course, attend the weeknight class and hear a panel of retired union leaders talk about their battles (physical and mental) to get shorter hours and better wages from employers, then grapple on the weekend with formulas for determining wages and with the various wage theories of economists such as Veblen and Marx. One of my handouts was a time-line which showed a wide range of historical events, including inventions which made life easier for workers; on it I also noted where their reading and films fit into it. It helped them fit it all together, especially for the papers in my course.

As for writing assignments, I tried a tact I had not used before: alternating take-home essay exams and short papers. I cut my written assignments to three. On numbers one and two, each student could choose to do either a regular five-page essay or a take-home text, but she had to do one of each; the only choice was which to do first. Still, it gave adults some choice, some control over scheduling the work. The topics for both were much the same, and, again, I gave them several choices. Most of them could not carefully read all the selections, so in my suggested topics I enabled them to make choices based on what they had read. I did not, of course, let them know this; as adults, I thought they should set their own priorities and get through as much as they felt important. Such choices are a vital part of education, though, alas, we cannot use them as effectively with traditional students.

Whether test or paper, then, I would list all the workable sources for a given topic, from that segment of the course, then require them use a minimum of three to discuss such topics as: ideas about education in that era, overt or covert; how rural wives' lives differed from city wives'; why immigrants and our own rural people came to the U.S. cities versus what they found when they arrived. The papers differed from the take-home exams in several ways: while the papers could use materials from the other two courses, the exams could not; drafts of papers had to be ready a week earlier so I could critique them before they wrote the final draft.

By the final month, then, each student had done one paper for me and one take-home exam, both graded for writing skills as well as content. On the third assignment they had three choices: a paper, an oral presentation complete with visual aids, or an audio tape. The latter two could be done alone or as a duet or small group.

In the weekend economics course, essay topics included; The Feminization of Poverty (very relevant to the female 3/4's of the PACE population),and pertinent to suggested topics in my assignments, The New vs. the Old Poverty, easily tied to my topic about what possessions workers owned in various areas; Measures of Poverty and Income Distribution, and other poverty concerns.

My list of selections ended, in time, somewhere in the Sixties; in fact, I had trouble finding workable material even from that decade. The few current pieces about work mostly have earlier time-settings. If we ask ourselves then, where people currently get their perspectives of the working class (self-perceptions or others), we must answer: from television programs, television ads, and ads in general. Few movies deal with our work except in a very peripheral way, and I found no novels at least none worth using in a course. Because this has significance, I used it as one of their topic choices for the final project.

So, for that final assignment their topic choices were two:

- Discuss in detail at least one modern source from which we get our perceptions of the working class (What perceptions do we get?)
- Choose one element of working class culture (refer to topics on previous assignments) and do an overview of the entire course with it.

In either topic and in any of the modes of delivery, they could relate the topic to family experiences. About one-third of them did so; this dove-tailed nicely with the weeknight final written assignment which was to do personal family history as it fit into a phase of labor history.

I would like to report that the other two instructors marked papers with the same detail that I did; alas, it is not true. The did, however, talk to students and to me about overall writing problems; whether or not they marked such errors, their grades often took them into account.

Each student wrote at least one complete essay for me which came in, first, in draft form; these I critiqued in great detail. Some students I sent to the writing lab; others came to me for desk-side tutoring. I even gave writing instruction and pep talks over the phone. Writing can be taught this way, and it is so refreshing to have students who care that I almost did not mind their anxiety.

It had its pay-off when the economics chair pulled me aside in a hallway to mutter, confidentially, that one older woman had "had someone else write her final paper" for his class. Not this woman; she would not consider such a ploy. She had worked hard at the lab and with me, and her final paper showed considerable improvement.

This illustrates the determination and willingness to work that PACE students have. It is partly their nature; the program is self-selective in that only those determined to earn a bachelor's degree begin it and/or stick with it. It is partly the nature of PACE; due to the large blocks of time students spend together, they develop a sense of competition and of camaraderie. It is partly the instructors; only those who dare to be innovative agree to teach in PACE, then they get caught up in the enthusiasm of the adult students and the life experience they bring to the classroom.

PACE works. It does not provide all the answers to the questions I posed, but it continues to change and to try. We add blocks, alter content, find new ways to integrate computers into the curriculum, for example. PACE does offer faculty and adult students a dynamic, non-traditional, interdisciplinary alternative to regular academe.

THE ASSESSMENT OF A HOMOGENEOUS INTERDISCIPLINARY UNIVERSITY CORE COURSE FOR THE MATURE ADULT

Denise M. Hart, Ed.D.
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Fairleigh Dickinson University is the largest independent higher education institution in New Jersey. It is non-sectarian, coeducational and offers programs on the undergraduate, graduate and professional levels. Approximately two-thirds of these students are undergraduates. Included in this group are traditional college-age students, adults seeking new careers, life-long learners seeking stimulation, professionals seeking career advancement, and women and minorities seeking educational opportunities previously missed.

The University Core Curriculum

Background and Context

With career concerns driving the growth of enrollments in the College of Business Administration and the College of Science and Engineering, and the concomitant decline in the liberal arts, the exposure of most students at Fairleigh Dickinson University to the humanities in any coherent and integrated way declined. Furthermore, students and non-liberal arts faculty alike began to develop the view that such exposure was not only unnecessary but, in fact, interfered with their professional pursuits. This attitude was not unique to Fairleigh Dickinson. Both the Carnegie Foundation in 1978 and D. Riesman in 1981 pointed out that in "higher education generally, the curriculum as a whole has become oriented toward the student as a consumer and toward his/her concern for occupational training.... In the contemporary world it appears clear that most college students and their families view colleges primarily as an avenue to financial security and status" (Pfnister, 1985, p. 45).

As a result of this attitude, what little exposure non-liberal arts students have to the humanities is usually fragmented and based on course availability, scheduling, and, unfortunately, the relative ease with which one can secure a good grade. In the process, we have seen the disenfranchising of a liberal arts faculty, whose role has frustratingly become that of a service component. They are unable to assume any continuity of students' knowledge from course to course. The creation of the University Core addresses this issue with integrated and sequential courses specifically designed for the freshman and sophomore populations. These courses serve a range of students, from the traditional liberal arts major to the professional specialist in areas such as accounting and engineering, in order to provide both a commonality of experience and a base of knowledge on which

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students and faculty can build in their succeeding courses regardless of the discipline. Essentially, we have identified two problems that we believe the University Core will help solve. The first is functional. Students at many comprehensive educational institutions with a multiplicity of curricula lack a common liberal arts experience and liberal learning perspective. Our core aims to remedy that. Even when that prescription is filled, an intellectual and thematic coherence may be missing. Our second objective, then, is to develop that coherence throughout the students' core sequence by articulating essential intellectual and humanistic themes that constitute for us at Fairleigh Dickinson the foundations of liberal learning.

Specific Curricular Objectives

The four courses of the core curriculum should create a growing awareness, a progressive awakening to the contexts in which we live as well as carry on our intellectual lives. The core is designed (a) to promote an understanding of individual and societal perspectives that will help students understand interpersonal relationships and educate them for responsible citizenship in a democracy; (b) to foster a global international perspective that will give them a way of looking at the world as well as at their own country; (c) to inculcate an appreciation for the interrelationships among bodies of knowledge generated in individual disciplines; and (d) to improve students' essential skills in written and oral communication, reading, and logical analysis. Furthermore, with the emphasis placed on discussion, analysis of issues, and repeated confrontations with problems, students will be taught to assume a greater responsibility for their education.

By the time students complete these four courses they should:

a.) Recognize and understand the complex and changing nature of our world and the increasingly interdependent character of the world's political, social, cultural and economic systems.

b.) Reach an understanding and appreciation of basic human commonalities and differences. This applies within America's multi-cultural society and in our relations with other nations. Students are introduced to how different people, nations and cultures organize their respective systems. The emphasis is on the similarities and differences among individuals, groups, and cultures during the past and the present.

c.) Develop an awareness of how perceptions, values and priorities differ among various individuals, groups and cultures. This means that students are introduced to the importance of perspectives and world views as factors that shape personal and group decisions and interaction with others. Students explore ethnocentricism, stereotyping, and value systems.

In addition, students will refine their research writing skills, improve their capacity to read material analytically, and should be able to formulate and present reasoned arguments.

Long Range Benefits

The University has high aspirations for the core which include:

a.) The cultivation of an intellectual and humanistically oriented value system that will guide students not only through their four years at Fairleigh Dickinson University University but also through the rest of their lives.

b.) The building of a genuinely collegial faculty that transcends disciplines and crosses over college interests.

c.) The establishment of a higher common standard for faculty and students across the University that will both challenge and enrich disciplinary studies.

d.) The creation of a model curriculum that in the words of our evaluator, Peter Caws, ". . .will prove to have made a significant contribution to academic policy at a critical juncture in the history of higher education in America" (P. Caws, personal communication, May 11, 1987).

Our four course sequence constituting the core focuses in turn on individual (Core I), national (Core II), international (Core III), and universal (Core IV) issues and events, integrating the humanities, social sciences, and, to some degree, the sciences, and stresses the relationship of the humanities to the ways in which we live in, think about, and react to the world around us. These four areas of focus were chosen because our preliminary needs assessment indicated to us that not only were our students parochial, lacking pervasive perspectives on liberal learning but, just as importantly, there was a lack of cognitive focus on intellectual and humanistic themes in their education. We believe that this parochialism could not be, indeed was not being, addressed simply by placing them in a variety of liberal arts courses.

We asked ourselves questions about the content, values, intellectual objectives, and competencies we wished to foster in our students in order to develop humanistic perspectives. Recognizing that what is important to us and our students might be different from what is important to another group at another university, we determined that we must go beyond the traditional disciplinary perspective to an interdisciplinary one. This interdisciplinary approach has been chosen in order 1) to encourage students to think of education as a process of discovery rather than simply the accumulation of knowledge, 2) to counter student tendencies to compartmentalize or segment thinking, 3) to demonstrate the integral role of the humanities in dealing with some of the most important questions and issues of our lives, 4) to broaden the intellectual framework, not only of our liberal arts students, but of our business and engineering students as well, and 5) to enable students to approach a primary reading from a variety of humanistic perspectives.

Success, FDU's Adult Degree Program

Forty-two percent of the nation's 12.2 million college students are presently mature learners according to Federal Department of Education statistics (Daniels, 1988). In response to this growing number of non-traditional students, colleges and universities are rapidly developing special programs for adult learners or enriching an already established forum for the adult students.

In the Fall of 1985, FDU coalesced an existing adult learner program, the Rutherford Plan (found locally on only one of the three main campuses at Rutherford, NJ) with a newly developed program, Success, a tri-campus adult degree program. Fairleigh Dickinson University, like other institutions of higher education, has been experiencing an increase in the enrollment of the non-traditional student in recent years, and, in fact, nearly three out of every four students are above the traditional college student age of 18 to 22. To meet the unique needs and diverse interests of this population, the Success program was established with three major goals:

1. to offer students a counseling-intense tailored program of study utilizing the traditional B.A. and B.S. degrees within the colleges of Liberal Arts and Arts and Sciences.

2. to offer selected course sections where a homogeneous age cohort could experience peer support in returning to the academic community, and

3. to offer opportunity for prior learning assessment and the granting of academic credit for experiences equivalent to college-level learning.

Moreover, the University recognizes the validity of education achieved outside the traditional college classroom and therefore accepts credits gained via CLEP, TECEP, DANTES, ACT-PEP, and the American Council on Education PONSI. All University students, however, must meet residency requirements of at least 32 credits including 50% of their major area of study.

Since the Success program's inception, selected course sections have been offered during each fall and spring semester ranging from one to three courses per campus. The course offerings represent requirements of the liberal arts core and have been offered in such subject areas as:

American Government
Literary Classics in Translation (Foreign Language/Literature)
Humanities Seminar (Philosophy)
The Family (Sociology)
Beginning Spanish I and II
English Composition

Although students are not required to participate in these course sections, the majority of Success students prefer to do so.

As a pilot study in the Spring 1988 semester, the University Core course, "Perspectives on the Individual," is being offered for the Success students at our Florham/Madison campus. (This is the first time a University Core course has been offered as a Success selected course section.) It will be our attempt to assess the student's interest in the course format, content and student achievement as compared to other sections of this course offered simultaneously where the population is heterogeneous by age. An investigator-made survey was developed to assess the student's grasp of course content, utilization of experiential learning and satisfaction with homogeneous vs. heterogeneous course composition. Three evening sections of University Core I were selected for study, one section entirely devoted to the Success program student cohort. The assessment will also include analysis of achievement differences between homogeneous and heterogeneous sections by scores on mid-term and final examinations, written assignments and final course grades.

Curriculum development implications within higher education illustrate several paramount items which are salient in the assessment of the survey data collected regarding these selected course sections vs. the homogeneous course sections:

1. It is anticipated that the segregated adult learner course section will incorporate the mature student's experiential learning so that they may integrate new ideas with what they already know, supporting the premise for better utilization of newly acquired information.

2. Adults prefer opportunities for learning where there is more than one medium for grasping course content, i.e. teacher-centered learning, class participation with peers, and self-directed inquiry.

The University Core courses offer variety in presentation. However, it is presumed that the segregation of adult learners within the Success section will afford the learners additional benefits by contributing to the two items listed above.

Overall, the ultimate goal within the University Core course offerings is to produce individuals who, in being educated to transcend discipline boundaries, will be able to apply this knowledge to lifelong learning. The Core is attempting to overcome departmentalized narrowness and encourage students within all majors to understand and experience general education theories, concepts, and principles and apply them to better understanding themselves and their society.

Course descriptions:

Core I: Perspectives on the Individual

Within the Western world we traditionally begin with the self in antithetical relationship to all others. Using *Brave New World* as a reference point throughout the course, we introduce the students to a perspective developed by biologists, geneticists, and sociologists. We move next to *Gilgamesh* and a discussion of the cultural emergence of the individual and socialization, interweaving introductory chapters from the autobiography of Malcolm X into the assignment. With Plato's *Crito and Apology*, we explore the development of the individual as dissenting thinker. Wordsworth's "Ode on Intimations of Immortality" serves as a focus on the theme of turning inward, which leads us to Freud and the struggle between instinctual drives and the expectations of civilization. *The Metamorphosis* follows as we focus more particularly on the conflict between the individual and family in modern society, and then turn to Tillie Olsen's *Tell Me A Riddle* as we try to deal with the question of how the structure of society may culturally repress the individuality of women or allow it to grow. The course concludes with Malcolm X and deals with such topics as the lifelong search for self and the transformation of the self through catharsis.

Core II: The American Experience: The Quest for Freedom

Starting with close readings of the Declaration of Independence, the Bill of Rights, Lincoln's Gettysburg Address, and Martin Luther King's "I Have a Dream," the course explores the concept of the promise of freedom, and to what degree the promise has been fulfilled, through the examination of central texts and issues in American culture. Texts include novels, plays, poems, essays, and autobiographical writings representing such authors as Franklin, Thoreau, Upton Sinclair, Arthur Miller, Anne Sexton, Frederick Douglass, Young Bear, and Dudley Randall.

Core III: Comparative Cultures

This course builds on Core II and begins with Chinua Achebe's *Things Fall Apart*, which introduces the theme of cross cultural conflict. Four geographic regions serve as the focus of the course: China, Mexico, Sub-Sahara Africa, and India. Recognizing the great diversity existing within the cultures of each of these areas, the course does not attempt an in-depth study of the cultural values of these regions but, rather, seeks to introduce (our often provincial) students to the concept of cultural diversity through illustration. The course centers around four organizing subjects or themes: 1) mythology and religion, 2) the individual and the community, 3) political, economic, and social institutions, and 4) science and technology. Readings include *Bhagavad Gita*, Narayan's *Vendor of Sweets*, *El Indio* by Lopez y Fuentes, Waley's *Three Ways of Thought in Ancient China*, and Oscar Lewis' *Five Families*.

Core IV: Global Issues

The course begins by calling attention to three issues which evidence, boldly, our interdependence in a world community: acid rain, nuclear weapons, and Aids. We go on to explore essential features -- and limits -- of the scientific world view which gives rise to and provides a possible avenue of escape from these global dilemmas. Alternative modes of addressing these problems -- economic/political and moral/spiritual -- are then studied. The course concludes with an exploration of possible futures. Student projects devoted to offering "solutions to selected problems play a major role in the latter half of the course. Texts include: Rachel Carson's *Under The Sea Wind*, "As Is," Buber's *I and Thou*, Morris's *Dismantling the Universe*, and Naisbitt's *Megatrends*.

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INSTITUTIONALIZING THE NON-TRADITIONAL PROGRAM
BACHELOR OF INDEPENDENT STUDIES, STATE UNIVERSITY SYSTEM
EXTERNAL DEGREE

Kevin E. Kearney

Introduction

As a part of introducing this presentation, I want to share that I was pleased that the referees of this conference identified with my proposed conference topic. When I submitted the proposal, I felt that I had something to share with other universities. Colleagues responsible for non-traditional programs, for example, might well be concerned about bringing their programs into the mainstream of the academic community, the reasons for making these changes and the nature of some of the changes involved. So, sensing an interest in the topic on the part of my audience, I look forward to sharing this information with you.

I intend to develop my paper on institutionalizing the non-traditional program under three main headings. First, we will be taking a look at the scenario; that is, I am going to give you a brief synopsis of the program and the setting of which it is a part. Once I have set the stage in this way, I plan to move on to a discussion of the rationale or the reasons behind our move toward institutionalization at the University of South Florida. The third major point will be a description of the actual processes involved in institutionalizing the non-traditional program; in other words, the changes that we made from the old program as we knew it to the new program as we know it now.

Body

First, what needs to be said about the scenario or the background for change? Specifically, I need to share some basic descriptive materials about the Bachelor of Independent Studies, External Degree Program, which is now known as the State University System, External Degree Program. It will also be helpful if I give you a basic

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understanding of both the specific and the general setting of which the program is a part. Actually, I will be dealing with this point in terms of four sub-headings. First, we'll take a look at the single university program; then, we'll look at the multi-university program; then, we'll make a quick survey of the institutional setting-- the university; and, finally, we'll go on to the broader setting of the scene in Florida.

When I refer to the single university program, I am referring to the historical BIS model which was operational from January of 1969 through June 1986. To give you a feel for this program, I am going to talk about the content or the curriculum of the BIS program and the learning format for reaching out to the learner. I will be saying a few things about the students, the faculty, and some of the major population outcomes over the eighteen year period.

The BIS Program is based on a curriculum of Interdisciplinary Studies as opposed to a major or a field of concentration. Faculty organizers who planned the program in the 1960's visualized the curriculum in terms of four broad areas of study. The first three areas represent the major fields of human knowledge: the Natural Sciences, the Social Sciences, and the Humanities. The final area represents a synthesis of the first three, and is called Inter-area Studies.

With regard to learning format, BIS students approach their studies in terms of a tutorial, a seminar, and an interdisciplinary studies thesis. The tutorial represents the predominant learning experience time-wise. The students read at home under the direction of a faculty adviser, proceeding at their own pace and in their own setting. Since most of our students are working full time and studying part time, we allow them a two year calendar to complete each study area. The tutorial is a print-intensive experience with the student reading core and supplementary books as directed by a faculty mentor and reporting back to the mentor as they complete various readings. When the faculty mentor feels that the student has satisfied the objectives of the tutorial, the student is invited to take an area comprehensive examination. Upon successful completion of the exam, the student progresses from one study area to another.

The seminar is a separate, yet closely related part of the study area. A student is eligible to attend the seminar upon completion of the tutorial comprehensive exam or via faculty certification for early admission to the seminar. The seminars are held in the summer months. The students reside on campus for two six-day weeks of intensive learning. An additional week of off campus work is required for seminar completion following the on campus meetings.

Students are told in advance that the objectives they are to accomplish in a study area are five-fold. First, they are to strive for a basic comprehension of the fundamental principles of each of the disciplines in the study area. Secondly, they are expected to strive for a working knowledge of the nomenclature of the several disciplines. Third, they are to strive for an understanding of the differences between disciplines and the kinship that binds them together within a study area. Fourth, they are to strive for the capacity to deal with issues through selective application of concepts drawn from relevant disciplines. And, finally, they are to strive to use these insights to resolve issues through independent and creative judgments. The sum total of these objectives represents the essence or the character of interdisciplinary scholarship. After completing three areas of study (a tutorial and a seminar for each), the student progresses to fourth area studies. In this Interarea Studies phase of the Program, the student is expected to research, write and defend an undergraduate thesis on an interdisciplinary topic. Certification for completion of this requirement comes from a faculty committee composed of the three scholars who directed the student through the first three study areas. So much for the content and the learning format of the program.

Now for a few generalizations on the students themselves. Our enrollment for 1987-88 is approaching 115 students. The average age of our student is 42. The range is from 25 to 68. Most of our people are motivated to complete a degree for self-enrichment and career enhancement. I think this is an important observation since very few of our people are interested in career entry. They are already in career, and so their focus is on career enhancement. Sixty percent of our students come to us with a community college credential. AA graduates, and AS graduates in selected health related fields, complete a two-area curriculum contract in BIS as opposed to a four area contract. Sixty-six percent of our students are women and thirty-four percent men. Most of our learners are from Florida with some from other states. Our future enrollment will be largely limited to Florida residents for reasons that I will point out as I go on.

Approximately 40 faculty members are currently teaching for us. Many have been teaching for BIS for ten years or more. A number of those who have just joined our ranks are from other universities reflecting our expansion effort. Faculty teach for BIS on an overload basis while performing full time duties in their home department. Typically, they are interested in working with adult students. They are willing to take the time in order to assist the adult learner. Also, they are interested in continuing to read beyond the confines of their own individual discipline area. For the most part, the faculty population represents senior faculty with tenure who enjoy the one-on-one interaction with the learner and the interdisciplinary dialogue with colleagues teaching in the program.

Program population outcomes to date are modest in number but dramatic in character. Of the approximately 100 people who have graduated from the BIS Program to date, approximately 35% have gone on to graduate work, and 10% have been initiated into a national honor society.

Moving from a description of the single university program or the historical BIS model, let me press on to a brief sketch of what

I have referred to as the multi-university program. BIS expansion statewide began in 1986. We are currently in our second year of expansion or implementation of the State University System, External Degree Program. Following the approval of a faculty committee proposal by the Undergraduate Council and the Council of Deans, and the Provost for Academic Affairs in 1985, the Board of Regents approved the proposal in the Spring of 1986 and set July 1 as the implementation date.

In our first year as a multi-university program (1986-87), we placed prime emphasis on refining and updating the curriculum in order the make the materials more intelligible and more accessible to our colleagues throughout Florida. In other words, we refined the curriculum package before exporting it. I also had the responsibility of traveling around the state -- visiting deans and chairs -- in an attempt to recruit faculty from the other state universities to teach in the External Degree Program. By the end of the first year, faculty from the University of Florida at Gainesville, and Florida State University in Tallahassee had joined forces with us. By the end of this year, it is my expectation that two additional universities will join ranks with us. The University of North Florida has already submitted several faculty nominations, and the University of Central Florida has made a commitment to support the effort. So, by the end of the second year of expansion (87-88), five of the nine State Universities should be actively involved in supporting the State University System, External Degree Program.

The BIS Credential remains a University of South Florida degree. Faculty from participating universities other than USF will be involved in all of the components of the Program (with the exception of the seminar) on their own campuses. Faculty from participating universities will be able to serve on a seminar team even though the seminars will be limited to the University of South Florida campus. A faculty member from the University of Florida, for example, will teach a seminar this summer in Tampa; he will be paid his seminar salary and will be compensated for his travel and per diem as well since he will be away from his home campus.

By the end of the third year of our expansion, it is my expectation that we will have from seven to nine of the State Universities involved in the state-wide effort. We have completed the refinement and updating of the curriculum. Further, we will have most of the information systems under control via utilization of state-of-the-art word processors, memory typewriters, software packages and computers. This is understandably important because the BIS Office is the single administrative office for the statewide program.

To give you a feel for the institutional setting of which the expanding program is a part, the University of South Florida is an urban and a regional university. USF's growth has been phenominal. When I first reported there as a faculty member in 1964, there were approximately 2,600 students. At this point in time, there are 29,000 students. Because of our urban location, 40% of the students reside on campus and 60% are commuter students. Further, we have grown from a single campus in Tampa to a regional university with outreach campuses in St. Petersburg, Sarasota, Ft. Myers, and Lakeland. To tie the program in with the setting, you can now visualize an enrollment of 115 students in an External Degree Program as part of a total student population of some 29,000 people.

A final important aspect of the scenario is the state setting. The 1970's in Florida marked the zenith of the expansion of existing universities and the creation of new universities and community colleges. At the present time, we have nine state universitites and 28 community colleges spread throughout the state. When I was a graduate student at the University of Florida in the 1950's, there were three state universities and a handful of community colleges. The emphasis has shifted from growth to an increased focus on quality. Another aspect of Florida that should be of interest to people who share an interest in alternative programs is the presence of large numbers of 18 to 22 year old learners. As many of you are aware, in some 47 states there is a scarcity of 18 to 22 year old students, but there are three states where because of the growth factor there is an abundance of 18 to 22 year old learners. Believe it or not, in Florida, undergraduate enrollment quotas have been set for the universities. In other words, 18 to 22 year old learners have to compete for space in the undergraduate programs. Because of this fact, the attitude in Florida toward non-traditional programs is supportive yet conservative. This realization came home to me when I visited states like New York, Illinois, New Jersey, Alabama and Virginia, where because of the difference in the demographics, great emphasis was being placed on non-traditional or alternative learning programs.

To sum up my first point, what is being institutionalized at the present time is a program that has been a single university program for eighteen years and is completing its second year as an expanding multi-university program. The setting is that of a major, urban, regional university in the climate of a conservative state with major focus on quality in higher education.

Now that we've gotten a grasp of the scenario or the program and the setting associated with the institutional process, I need to move on to the second major point of my speech, and that is the rationale or the reasons that led us to get on with the process of institutionalizing the non-traditional program. In my thinking, I've broken these reasons down into several categories: there are historical reasons; there are philosophical reasons; and I guess a combination of what I'd call the evolutionary-practical kinds of reasons.

Let's start out with the historical rationale. To give credit where credit is due, I have to point to the lessons taught or the influence of the SACS people - the Southern Association of Colleges and Schools. One name that readily comes to mind is that of Grover Andrews. Early on, we learned from him and other program reviewers that the program had to be a part of the university. Admittedly, at this point we were "a part of but still apart from" because we were new in our role of being non-traditional. Rightly or wrongly we felt it was important to be a part of but different from the mainstream. We were a part of the traditional university in that no student was admitted to the BIS Program without first being admitted to the University itself as a degree seeking student. Because of our interest in quality from the very beginning and our desire to attract a special kind of student for this rather special Program, there is a second level of admissions, namely approval by the BIS faculty committee which screens every applicant admitted to the Program. The Committee has done so for twenty years. So, historically and through the present day, students are admissible to the institution as a degree seeking student in keeping with the same criteria as any other student.

In the early days, we were also made aware and remained aware of the importance of integrating program literature into University publications. It was not enough to have a special flyer or brochure promoting the program. It was important to have a description of the Program, its curriculum, and its objectives and requirements as a part of the University catalog. So, it was important to get the Program into University literature. Also, emphasis was placed on approval for faculty teaching in the Program from the academic community; i.e., approval from the chair and the dean in the various colleges. Finally, from day one, faculty from traditional departments serving rotating terms on the BIS Committee have been responsible for overseeing the overall program including updating the curriculum, selecting faculty, and making program policy recommendations to the Provost. In these ways, then, early on we were a part of the traditional institution as opposed to being apart from it.

Philosophical reasons certainly spilled over from the historical reasons. When I think of philosophical reasons, however, I think of a couple of people who nudged us several inches further toward institutionalization. One such person was Dr. Samuel Gould, past chairman of the Carnegie Commission on Non-traditional Study, chancellor of the SUNY system, and at the time that he visited us chief consultant for Board of Regents academic program review group that had been assigned to review the BIS Program in 1974. As a part of that function, Dr. Gould emphasized the principle of "folding the Program in" as a regular part of the institution. The part that I remember about all of this is that he told me we needed to do it, but he didn't tell us how to get on with it, and at the time I had no idea how we would get on with it. A few years later, in 1983, again under the heading of philosophical evolution, I went to the Fourth National Conference on External Degree Programs sponsored by the American Council on Education. At that meeting, I listened to a presentation by Dr. Joyce A. Scott, Associate Vice President for Academic Affairs at the University of Wyoming. The title of her speech was: "Integration of External Degree Programs into the Mainstream of Academic Institutions." In her speech, Dr. Scott came across very clearly that those responsible for non-traditional programs should get on with institutionalizing their programs or face the possibility of extinction in the next ten years. After hearing that speech, I felt that I was nudged a couple more inches toward getting on with the process of institutionalizing the non-traditional program.

Practical evolutionary influences over time also contined to prod us in this direction. For example, the State Legislature passed what has become known as the "Gordon Rule" some years back, requiring that students have certain competencies in reading and writing and quantification before they could graduate from a university. This became known as the "Gordon Rule" and the BIS Program like any other degree program on campus had to meet these requirements. In one more way, we were being institutionalized.

Then came the CLAST requirements - the requirement that any student that went from the lower level to upper level studies had to have satisfactory scores on a test battery that became known as the College Level Academic Skills Test. The rule was applied to the BIS Program as well as to all other degree programs on campus.

In more recent days, the Florida Legislature has passed a rule requiring that all students admitted to a university must have completed two years of foreign language at the high school level. The statute went on to stipulate that if the student had not completed high school language requirements that they could be admitted to the university, but the admission requirement would then become an exit requirement. In essence, foreign language requirements for some BIS students were added on as a part of their college curriculum and once again, BIS took another step toward institutionalization.

Another facet of what I call the practical evolutionary rationale were the number of changes that dramatically took us in the direction of institutionalization as we made the conversion from being a single university program to becoming a state university program. And I think as I talk about the actual process of institutionalization, you can visualize with me the dramatic steps that were taken as a part of this change in the direction of institutionalizing the non-traditional program.

By way summary, the rationale for institutionalizing BIS is not something that happened overnight. There is a history to it; there is a philosophical influence, and the practical and evolutionary developments that have taken place over the twenty years have helped us to move in that direction.

As promised, the third major point in my presentation concerns the actual process or the major changes that are involved in institutionalizing the non-traditional program. As I talk about each of these changes (eight in number) I'm going to talk about the concept or mechanism under the BIS historical model, and then talk about the change that was made under the BIS expansion model as a way of highlighting the principle aspects of institutionalization.

The first major change concerns the budget for the Program. Under the historical model, the BIS budget was a combination of extension incidental (EI) and education and general (E & G) funds. Essentially, we collected fees from in-state and out-of-state students that were roughly comparable to tuition charged Florida residents, and we used these monies to pay faculty modest stipends for their contributions to the Program. Another aspect to the old budget is that education and general funds were made available for the director's position and that of a secretary and relatively few dollars were made available for other expenses. As we look back at the funding schemes we had for the first eighteen years of the Program, my colleagues and I enjoy the description of ourselves as a sort of "academic salvation army" that was holding the non-traditional program together. The budget for the State University System, External Degree Program - which we'll call the SUS model - is quite a different thing. We have an education and general budget with categories for salary, expenses, and equipment. The funds are specifically earmarked for the External Degree Program. By the time we reach the zenith of our expansion -- 145 students statewide -- we will hold our enrollment at that level. In other words, we are funded in keeping with our specific enrollment projections. I think the rate is approximately $2,500 per student per year based on active headcount. The character of the new budget makes it clear that the process of institutionalization in this aspect yields in this instance the dramatic advantage of fiscal proviso for program quality and continuity.

A second aspect of institutionalization is that we went from being a non-FTE (full-time equivalent) generating program to becoming an FTE generating program. In other words, our university receives additional funds from the State to support instruction for every active student signed up for a semester for fifteen semester hours. The advantage of this aspect of institutionalization is dramatically clear in that we went from being a program that was dependent upon our institution to a program that contributes to the financial support of our institution.

A third aspect of institutionalization is the change from no official course numbers and titles for segments of the BIS curriculum. Under the SUS Program, BIS segments are involved in the statewide curriculum inventory and course numbering system which became the trigger for inclusion in the FTE count. This change has no doubt upgraded the perception of BIS as an academic program.

A fourth facet of institutionalization is that under the old program, students paid special tuition, and it was the same for in-state as it was for out-of-state students. Under this system, our students were limited to academic privileges. Because they didn't pay a student activity fee, they didn't have access to such activities as theater productions, university guest lectures, and recreational facilities. They could participate, but not at the student rate. Under the new system, our students pay regular tuition which makes them eligible across the board for academic and student activity privileges. Note needs to be made of one disadvantage. By accepting state funding for the external program, it became necessary to modify the fee schedule so that Florida residents pay in-state fees and non-residents pay out-of-state fees. The obvious price tag here is the reduction in number of out-of-state students that contribute to the cosmopolitan nature of the program population. The other side of the coin is when you are accepting tax payers' dollars to support a program, then you have to accept the reality that first priority financially is given to the Florida residents.

Another aspect of the change was one of labels. The old program had been described as a non-credit, continuing education program. Under the new, the program is described as a credit program funded by E & G funds. Stereotyping is unfair, but from the standpoint of the labels involved, the program now has a more positive image.

Another aspect of institutionalization is that under the old model, students were not included in the computer print-out for the Registrar's records of registered students. BIS students were historically kept in a separate file as "those people in that special program over there." They were not considered regular students. With the changeover to the State University System, the students are now included in the official records of the Registrar's Office; their names appear in the print-out of registered students. In addition to image, which is a minor facet of this changeover, the practical advantage is for the person with a student loan. Under the old system, if the bank called and asked for verification of a student's registration, unless the clerk involved knew about the regular versus special student dichotomy, the BIS student was often reported as "not registered." The loan was called back and problems ensued. Under the SUS system, when a bank asks a similar type question, the BIS student will consistently show up as a registered student in the registrar's records.

Another aspect of the old program was that our students were not listed in the course schedule that was put out for the university. On the face of it, this doesn't seem significant. Under the new system our courses are included in the class schedule. Under the extension model, if you were not included in the course schedule, you had to take what was left of classroom space, and sometimes finding a place to offer a seminar became very difficult. Under the SUS plan, with benefit of inclusion in the class schedule, we automatically qualify for scheduling of classroom space, several semesters in advance.

A final aspect of institutionalization is that under the historical model, the program description was limited to coverage in one part of the university catalog. Under the SUS model, program description is covered in three separate parts of the university catalog. The academic regulations section, the college section, and the course number and course listings section. An obvious advantage here is that the program gets wider publicity; it appears as an integral part of the collegial structure of the university; and ultimately, it's more readily acceptable to faculty on campus who haven't had a close working knowledge of or association with the program.

In summary, as we look at the various aspects of institutionalization, we'll certainly note that some of them are more significant than others. Collectively, these changes have modified the image and character of the non-traditional program. Collectively, they represent the institutionalization of the Program. To paraphrase Sam Gould, the overall process has folded the non-traditional program into the mainstream of the academic community.

Conclusion

As promised, we've taken a look at the program and the setting as the scenario for change. We've reviewed the rationale for institutionalization and it has helped us to see that institutionalization was actually a gradual evolutionary process, as well as an intentional effort to effect change. Finally, we've taken a blow-by-blow look at the processes involved in institutionalizing the program from the old model to the SUS program. As we envisioned the various aspects of institutionalization, we noted that for the most part, the advantages outweighed the disadvantages. Certainly, the process of changing over is a very difficult and sometimes trying effort, but once the new system is in place, the advantages will outweigh the disadvantages.

CREATING LEARNING ENVIRONMENTS: RESEARCH AND LEADERSHIP

Barbara E. Kovach[1]

The Honors Program in Research and Leadership at University College -- the adult undergraduate college on the New Brunswick campus of Rutgers University -- initially aimed at accomplishing two objectives: (1) to provide an enriching intellectual experience for those students who were academically aspiring; and (2) to create a context for learning for all students, together with faculty and community representatives, in which students were encouraged to stretch their limits, test their abilities, and ultimately assume more responsibility for themselves and their communities.

In the beginning, these two objectives were formalized in two separate programs: (1) an Honors program currently enrolling 40 students, and (2) the Clusters program currently enrolling 140 students. In both settings, we strove to enact the principles that educational experts evoke as basic to excellence in education -- for adults, for college students of the traditional age, and, in fact for learners of all ages (Astin, 1987; Newman, 1985; Whitehead, 1913).

Excellence in Education

Both programs -- the Honors Program and the Clusters Program -- were designed to provide adult students with exciting and enriching learning environments. In both programs, the focus was interdisciplinary, subjects were relevant to student concerns, and students were required to formulate their own responses to the material and to integrate their learning into their life experiences. In both settings, students had ample opportunities to discuss ideas, theories and their own experience with both instructors and other students. In addition, the Clusters Program provided multiple settings for learning: in colloquies, seminars, and other non-classroom programs within the university; and in community and work settings outside of the university. Finally, this program also generated a network of mentors, counselors and advisors with whom students could reflect upon their learning and move toward a new personal integration (Astin, 1987; Newman, 1985). In short, both programs were designed to create small learning communities built on a commonality of interests and offering opportunities for intellectual and emotional personal growth.

Instructors were drawn primarily from the university faculty, but secondarily from the larger community, who were excellent stage-setters, capable of creating the kind of structured and semi-structured setting in which such learning could take place. They were enthusiastic about their material, excited about the possibilities of viewing what they had known in new ways, and superb in communicating both their knowledge and their enthusiasm to the students. Alexander Astin in his recent book, **Achieving Excellence in Education** (1987), describes similar qualities as characteristics of excellent teachers:

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> The central qualities that make for successful teaching can be simply stated: command of the material to be taught, a contagious enthusiasm for the play of ideas, optimism about human potential, the involvement of one's students, and -- not least -- sensitivity, integrity, and warmth as a human being (p. 154).

Such instructors have, in fact, the same characteristics described by Frank Newman in the **Higher Education and the American Resurgence** (1985) as his goal for students graduating from institutions of higher learning: they would know that they can make a difference in acting for the long-term good of many others, that what they do counts, that they have to assume a responsibility for others as well as themselves, and that their teaching reflects and relates to the world in which they live. In such a learning environment, less distinction would exist between teachers and learners; at varied levels, all participants in the learning process would learn and grow together in what Astin calls the talent development model.

The importance of creating such learning environments -- of developing the full talent of our students -- has become readily apparent in the last decades as America has lost its competitive edge in a shrinking world in which many countries are developing strong industries and gaining a consequent economic advantage. The need for developing all of America's talent, however, was foreseen by John Gardner in 1961 when he wrote:

> **Our kind of society demands the maximum development of individual potentialities at every level of ability** . . . . We are now talking about an approach to excellence and a conception of excellence that will bring a whole society to the peak of performance (pp. 74, 132-133).

Program Development: 1984-1987

In 1984 University College administrators, faculty and students began to counter the perceived lack of identity, spirit and community among its students which followed a major reorganization of the campus in 1981-1982. In order to create a new sense of community, to increase motivation for learning and to decrease attrition, administrators with the help of faculty and students, created a series of interrelated classroom and non-classroom programs designed to involve students in their own learning with consistent interaction with faculty, corporate and professional representatives and each other in areas of strong mutual interest.

Two programs offered their first classes to small groups of students in early 1985: the Honors Program for very able students and the Clusters Program for all capable students. Briefly, the programs as they were first formulated may be described as follows:

> The Honors Program offered students with strong academic aspirations an opportunity to explore a specific topic "on the edge of a discipline" in more depth than is generally possible in the regular classroom. Students

were required to take three such courses, each taught by one professor in his or her field of expertise, and to take these courses in at least two broadly defined fields of knowledge. In addition, students were required to take three mini-seminars of 1 credit each, generally taught on two Saturdays during the semester, which focused on the models and skills necessary for extensive academic research. At the conclusion of their coursework, students met with an advisor and initiated and carried out an original research project in subject matter related to their academic major.

The Clusters Program offered students a three-course sequence with classroom courses designed to provide students with a diversity of viewpoints from a seven-person team of experts in theory and in practice, drawn from inside and outside the university. The students' task was to integrate these viewpoints into a cohesive whole which is compatible with their own thinking and experience. Extensive reading supplemented the perspectives of the instructor and the Cluster team. An opportunity for students to meet in small groups was provided on a weekly basis, with Cluster team members acting as facilitators, to discuss and integrate the material. Students were also required to attend a proportion of the conferences, symposia and colloquia offered by the college in conversational settings so that students, as well as other participants, have the opportunity to interact with experts in many fields from around the country.

By the middle of 1986, over 100 students had joined the programs and indeed did perceive themselves as participants in small learning programs. They were excited and enthusiastic about their courses and attended in significant numbers the non-classroom events which complemented the classroom activity. From interaction with these students, administrators and faculty came to recognize (1) that excellence in education was also leadership development--and we began to formalize the leadership components of both programs; and (2) that regardless of title, the programs were drawing the very best of our student body and were both, in reality, honors programs -- thus we are now proposing to formalize the honors components of each program in parallel fashion so that they will become two wings of one program.

Formalizing the Leadership Components: 1987-1988

Theory on the development of leadership emphasizes the importance of people learning to be innovative and willing to risk, taking responsibility for themselves and their communities and knowing that they can make a positive difference in their environments. Experts in this area agree with writers on higher education in seeing that our educational institutions fall short in all of these areas. Robert Greenleaf, in introducing **Servant as Leader**, writes that his deep concern is "for the total process of education and its seeming indifference to the individual as servant and leader, as a person and in society," and continues by saying that the focus on intellectual preparation does not favor optimal growth (1973, p. 5). John Gardner, in a similar series of papers written a decade later, states eloquently that the emphasis on rational, technical problem-solving in our institutions does little to prepare potential leaders "to move into an area where intuition and empathy are powerful aids to problem-solving (1986, p. 13)

In a recently published book, **The Leadership Factor**, John Kotter makes the point strongly:

> Few of the attributes [of leadership] seem to be developed from our educational system. Aside from some narrow intellectual skills, none of the items . . . is systematically developed to any significant degree in most schools today, including graduate schools of business. This is not to say that schools are incapable of doing more. They simply choose not to do more (1988, p. 34).

And later he states again:

> Colleges . . . do precious little to help people learn how to get things done through others when one has little or no formal control of those others. They do not show them how to be leaders (1988, p. 127).

Leadership for Kotter, as for Greenleaf and Gardner, is leadership with a small "l": an individual's ability to see the world as it is and to act so as to achieve positive change working with and through others -- in the highest long-term interests of the group.

According to these writers, colleges and universities have an obligation to correct this deficiency and to act so as to develop leadership potential in student populations. Greenleaf and Gardner both advocate a background in the liberal arts because of the importance of seeing the larger picture. "Leaders today, at whatever level . . . can only hope to channel [the reality of unceasing change if] they understand the larger framework in which change is occurring, and [if] they know their own culture and the history of their own institutions" (Gardner, 1987, p. 11). Yet, in addition, students must also experience boundary-crossing experiences (Gardner, 1987, p. 22) which expand their fund of experiential knowledge and cause them to rethink any preconceptions they bring with them from their past. Further, as students are encouraged to reflect upon their experience, they require the company of mentors, advisors or counselors in order to make the most sense of the experiences they do encounter.

The administration and staff of University College stumbled across much of what is written above in their own quest for the best possible educational setting for adult students. As it became clear, that the college was fully engaged in an adventure in leadership development, we found an appropriate umbrella for all our programs with the creation of the Institute for the Development of Leadership (IDL).

At the inaugural session of the Institute in April, 1987, the Senior Council of the Institute, composed of corporate and academic executives, spent one full day reflecting on their own experience in order to enumerate guidelines for the development of leadership. Their guidelines included (1) providing conceptual frameworks for understanding the phenomenon of leadership; (2) requiring that students engage in leadership experiences outside of the classroom; (3) encouraging students to learn from these experiences through discussions with academic and community mentors and sponsors; and then (4) requiring that students teach others who come behind them what they have learned from their leadership experiences.

Following the April session, the Instructional Council of IDL, composed of faculty and local corporate mid-level managers, worked with selected students serving as members of the Student Advisory Board to implement these guidelines. Individuals from these groups created an "Admentorship Program" in which students were matched with advisors outside of the university and developed a syllabus for the laboratory class of IDL, **Leadership Transitions** -- a senior seminar in the Clusters Program -- which was piloted during the fall of 1987.

At an Executive Retreat of the Institute in October, 1987, the Senior Council members reviewed progress with representatives of the Instructional Council and Student Advisory Board. Since the earlier guidelines had been realized, the Senior Council felt free to take an even tougher stance toward the whole matter of leadership development. Now that the program was a reality, they were able to fine-tune many of the initial points and clarify further the nature of leadership and some of the steps in its development.

First, they defined leadership more specifically. Leadership is not, they said, the same thing as growth in personal awareness or problem-solving skills; rather there are separate developmental timetables for growth in all three areas. Moreover, the three areas themselves form a hierarchy in relationship to each other, with growth in personal awareness, first, and in problem-solving, second, preceding the development of leadership. Personal development requires a progressive increase in self-awareness and an ability to **be** oneself. The development of problem-solving skills moves through a series of steps until a person can say confidently, "I can do it," and demonstrates the ability to **act**. Finally, leadership might evolve from personal and problem-solving development **if** one has the courage to **be** and to **act** with others in the service of a cause greater than oneself.

According to Senior Council members, the leap to using one's skills as a leader rather than for self alone requires that one **cares** what happens and is committed to making a positive difference in the area of concern. Leadership is difficult: there are at least as many downs as ups, and sometimes the valleys block any view of the peaks. Thus acting so as to be popular or one of the gang cannot constitute leadership. Acting under the aegis of another also cannot be leadership, no matter how fine the work, because responsibility is not assumed for directions taken. Finally, acting to create short-term change with little concern for long-term results does not count as leadership. Leadership is achieving long-term goals, acting with and through others.

Further, in all three areas -- personal growth, problem-solving and leadership -- there is need to relearn again and again. As one moves into larger contexts or faces bigger challenges many of the early learning steps must be recycled in order to broaden and deepen the skill base on which leadership is built. The test of leadership, moreover, must be in doing a leadership project. One does not become a leader by observing or thinking alone.

This clarification of the nature of leadership was compatible with the Senior Council's position on the development of leadership. Prompted by discussions of mentoring and coaching, members of the Senior Council were firm in their conviction that mentoring or coaching **not** be provided for students in the Clusters Program **until** they had committed themselves to leading others in creating change in some situation about which they were deeply concerned. They were clear in placing responsibility squarely upon the students for taking the leap into leadership. Opportunities to serve (to lead) must be found by the student; such opportunities cannot be given out wholesale to those who have not yet demonstrated the personal awareness, the problem-solving ability, and the desire to serve, all of which mark the path to leadership.

In the two weeks following this IDL session, students in the **Leadership Transitions** course of the Clusters Program responded to the clarifications offered by the Senior Council by proposing that their program be extended to include a self-initiated, "doing" component with weekly coaching sessions in small groups with a member of the Instructional Council.

That the college administration's early concerns about adult education would bring us to this point -- creating a leadership program in tandem with students -- was not anticipated. By the end of 1987, it was proposed that the Clusters Program be renamed the Leadership Program. It was at this point as well that it became clear that we might, in fact, propose that the Leadership Program become the second wing of the Honors Program and that both programs be reshaped to be parallel to each other -- learning environments for educating the very best of the adult student population.

Formalizing the Honors Components: 1988

As we developed the leadership components of what had been the Clusters Program, we had access to more and more data on our student population. Of the 140 students in the program, almost all had cumulative grade point averages of B or better -- and the work which they were accomplishing was similar in quality to those enrolled in the Honors Program itself. Consequently, faculty committees redesigned the Clusters program as the Leadership option of the Honors Program. The Honors Program thus would have two tracks: (1) **Option A,** adapted from the model of traditional honors programs; and (2) **Option B,** an innovative, interdisciplinary, team-led program combining intellectual effort with work-related experiences. Students in either program would take 12 credits (3 units less than the current Honors Program and 3 units more than the current Clusters Program); the tracks would parallel each other but differ in content and emphasis.

Option A would require 2 3-credit College Honors Seminars, 3 1-credit Research Mini-Seminars, and conclude with a 3-6 credit Disciplinary Research Project most often in the major discipline. Option B would also require 2 3-

credit College Honors Seminars (Leadership Seminar I and Leadership Seminar II), 42 hours of attendance at Conferences & Symposia with 3 credits awarded upon completion of analytical papers, and a 3-6 credit Leadership Research Project conducted under the guidance of the Honors Committee.

Admission to either track of the College Honors Program would then require a minimum of 30 college credits, a cumulative grade-point average of 3.0, three letters of recommendations from college instructors or professional supervisors, and an interview with the College Honors Committee when deemed appropriate. All students would be evaluated by their professors at the end of each seminar; these evaluations would be shared with the student and then sent to the Honors Committee. Those students whose performance falls short of standards for an Honors program would be warned or withdrawn from the program. Further, all students must be continuously enrolled throughout the course of the program.

Students would conclude the program with a written and oral presentation of their Research Project. The oral presentation would be made to the Student Honors Committee, including one faculty member from their major department, one Fellow of University College, and one member of the Honors Committee. A student's mentor could be present as a non-voting member. The Student Honors Committee would recommend to the College Honors Committee the level of honors distinction earned by the student: students would graduate as University College Honors Scholars with Honors, High Honors or Highest Honors, as recommended by the Honors Committee of the college. (The structure and procedures of the proposed program, along with associated faculty and corporate representatives, is given in the Appendix.)

Conclusions

In both programs, therefore, we are now pursuing excellence and leadership, in scholarship and in action, in the library and laboratory and in the larger community. The many options we are offering to the best of our students are all tailored to move students toward leadership positions in their chosen worlds.

The next task at University College is to dramatically increase the numbers of students progressing through either honors sequence and learning to carry out their own ideas either on paper or in the community. In the October session of IDL, Senior Council members emphasized their view that a growing country-wide demand for people who could adapt to changing conditions, demonstrate high levels of initiative and accept responsibility for others, far exceeded the anticipated supply from our program.

In order to increase the numbers of students moving through such programs, we have turned to other institutions of higher education, inviting them to join us in the Institute for the Development of Leadership. Specifically, we have asked: (1) teams of administrators, faculty and students from selected universities and colleges to participate participate in the next Institute session, to utilize whatever of our materials are appropriate to their purposes, and to meet with UC-associated Institute members to discuss adapting the program to the needs of students and faculty at their universities; and (2) our own graduates of the Honors Programs join the teams attending our Institute on their home campus to assist them in the development of similar programs. These student graduates would be the first members of a growing pool of students judged capable of communicating their experience to others -- who would also serve as consultants to participating universities.

The primary objective of "growing" the Leadership Program outside of our university is to markedly increase the number of students in learning environments around the country who are introduced to the literature, thinking, and behavior that would lead them down leadership paths in the future. In doing so we may, as John Gardner reminds us, provide the context for the development of leadership, but we cannot determine the result:

> What we can do is to offer promising young people opportunities and challenges favorable to the flowering of whatever leadership gifts they may have. Some will become leaders, partly from what we enabled them to learn and from challenges we set before them, partly from the self-knowledge we helped them achieve. Beyond that, time and events will teach them. Mistakes and failures will teach them. And with respect to the final outcome, especially in the case of the greatest leaders, a decent humility should remind us that their emergence is a marvel and a mystery. (1987, p. 3-4)

The course on which University College now finds itself was not foreseen four years ago when we set out to create communities of students, faculty and professionals to learn together. The idea of learning environments as small communities, once implemented in a small way, developed its own momentum and direction. In this effort, the community members -- the students -- are the key component and the greatest human resource of University College.

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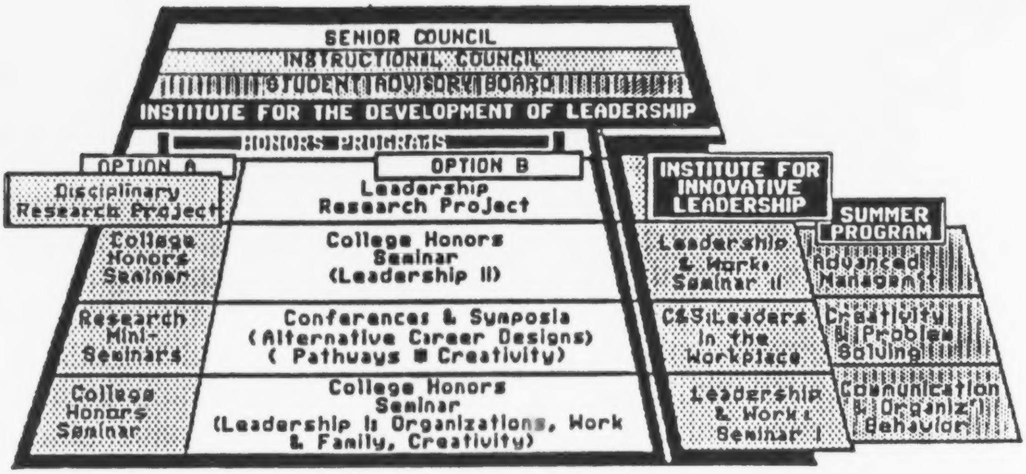
University College - New Brunswick

THE LEADERSHIP PROGRAM

DEAN OF UNIVERSITY COLLEGE

BARBARA E. KOVACH


SENIOR COUNCIL
INSTRUCTIONAL COUNCIL
STUDENT ADVISORY BOARD
INSTITUTE FOR THE DEVELOPMENT OF LEADERSHIP
HONORS PROGRAMS
OPTION A
OPTION B
Disciplinary Research Project
Leadership Research Project
College Honors Seminar
College Honors Seminar (Leadership II)
Research Mini-Seminars
Conferences & Symposia (Alternative Career Designs) (Pathways ■ Creativity)
College Honors Seminar
College Honors Seminar (Leadership I: Organizations, Work & Family, Creativity)
INSTITUTE FOR INNOVATIVE LEADERSHIP
Leadership & Work: Seminar II
C&S: Leaders In the Workplace
Leadership & Work: Seminar I
SUMMER PROGRAM
Advanced Managem't
Creativity & Problem Solving
Communication & Organiz'l Behavior

HONORS PROGRAM: OPTION B
INSTITUTE FOR INNOVATIVE LEADERSHIP
CONFERENCES & SYMPOSIA

JOAN RIESE
(201) 932-8399

HONORS PROGRAM: OPTION A
SUMMER PROGRAM

CAROLYN BROADBELT
(201) 932-7234

ADMISSION REQUIREMENTS

HONORS PROGRAMS: AT LEAST 30 CREDITS AND CUMULATIVE G.P.A. OF 3.0; LETTERS OF RECOMMENDATION FROM FACULTY OR PROFESSIONAL SUPERVISORS; INTERVIEW WITH COLLEGE HONORS COMMITTEE AS APPROPRIATE

INSTITUTE FOR INNOVATIVE LEADERSHIP: NOMINATION OF SUPERVISOR WITHIN COOPERATING CORPORATION

SUMMER PROGRAM : CURRENT ENROLLMENT IN UNDERGRADUATE OR GRADUATE PROGRAM AND SIGNIFICANT WORK EXPERIENCE

PROGRAM COURSES: QUALIFIED STUDENTS NOT ENROLLED IN THE HONORS PROGRAM MAY TAKE INDIVIDUAL COURSES ON A SPACE AVAILABLE BASIS WITH DEAN'S PERMISSION

PROGRAM REQUIREMENTS

HONORS PROGRAMS: TWO 3-CREDIT SEMINARS AND 3 1-CREDIT MINI-SEMINARS FOR OPTION A 3 CREDITS (P/NC) FOR ATTENDANCE AT 42 HOURS OF CONFERENCES AND SYMPOSIA FOR OPTION B; COMPLETION OF A 3-6 CREDIT RESEARCH PROJECT CONCLUDING WITH AN ORAL AND WRITTEN PRESENTATION TO THE STUDENT'S HONORS COMMITTEE (CONSISTING OF ONE FACULTY MEMBER EACH FROM UC FELLOWS, MAJOR DEPARTMENT, AND COLLEGE HONORS COMMITTEE)

CONTINUOUS ENROLLMENT FOR AT LEAST .5 CREDIT THROUGHOUT PARTICIPATION IN PROGRAM

COURSE SUBSTITUTION: STUDENTS MAY SUBSTITUTE ONE COURSE FROM THE SUMMER PROGRAM FOR ONE SEMINAR (LEADERSHIP I) IN OPTION B; FOR 2/3 REQUIREMENT OF CONFERENCES AND SYMPOSIA IN OPTION B; IN ADDITION 2/3 OF THE REQUIREMENTS FOR MINI-SEMINARS AND CONFERENCES AND SYMPOSIA ARE INTERCHANGEABLE FOR STUDENTS ENROLLED IN EITHER OPTION A OR OPTION B.

EVALUATIONS, CERTIFICATES AND COLLEGE HONORS

EVALUATIONS: STUDENTS WILL RECEIVE A WRITTEN EVALUATION FROM THEIR PROFESSOR AT THE CONCLUSION OF EACH SEMINAR WHICH WILL THEN BE SENT TO THE COLLEGE HONORS COMMITTEE; STUDENTS WHOSE WORK HAS FALLEN BELOW HONORS QUALITY WILL BE WARNED OR WITHDRAWN FROM THE PROGRAM

CERTIFICATES: STUDENTS SATISFACTORILY COMPLETING 9 CREDITS IN EITHER HONORS PROGRAMS OR THE SUMMER INSTITUTE WILL RECEIVE A CERTIFICATE OF PARTICIPATION UPON GRADUATION FROM THE COLLEGE

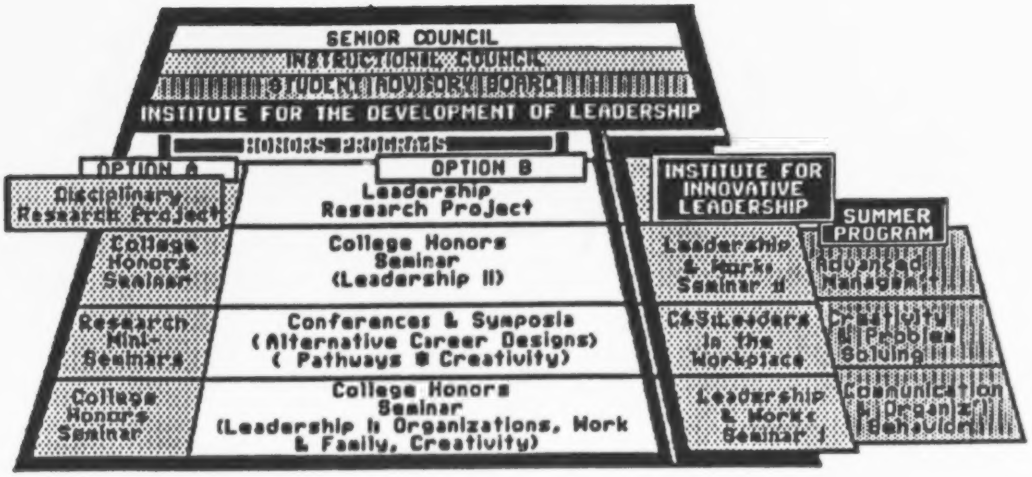
COLLEGE HONORS: STUDENTS SATISFACTORILY COMPLETING 9 CREDITS AND A RESEARCH PROJECT FOR 3-6 CREDITS WHILE MAINTAINING A G.P.A. OF 3.2 WILL GRADUATE AS UNIVERSITY COLLEGE HONORS SCHOLARS UPON THE RECOMMENDATION OF THE STUDENT'S HONORS COMMITTEE.

University College - New Brunswick

THE LEADERSHIP PROGRAM

DEAN OF UNIVERSITY COLLEGE

BARBARA E. KOVACH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INSTRUCTIONAL COUNCIL
STUDENT ADVISORY BOARD
INSTITUTE FOR THE DEVELOPMENT OF LEADERSHIP
HONORS PROGRAMS
OPTION A
OPTION B
Disciplinary Research Project
Leadership Research Project
College Honors Seminar
College Honors Seminar (Leadership II)
Research Mini-Seminars
Conferences & Symposia (Alternative Career Designs) (Pathways & Creativity)
College Honors Seminar
College Honors Seminar (Leadership in Organizations, Work & Family, Creativity)
INSTITUTE FOR INNOVATIVE LEADERSHIP
SUMMER PROGRAM
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Advanced Management
C&S: Leaders in the Workplace
Creativity & Problem Solving
Leadership & Work Seminar I
Communication in Organiz'l Behavior

DIRECTOR OF HONORS PROGRAMS

PAUL BRUNER

ADMINISTRATIVE ASSISTANT:
HONORS: OPTION B &
CONFERENCES & SYMPOSIA

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SUMMER PROGRAMS

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CONCENTRATION TRACKS FOR AN ADULT DEGREE PROGRAM: A SOLUTION TO A DILEMMA

Pat Kuiken and Peter P. Balsamo

Introduction

Radford University is a medium sized, comprehensive state university nestled in the foothills of the Blue Ridge. The student body of approximately 8500 undergraduate and graduate students contains an undergraduate adult constituency of about five percent of the total. Thus, most students are traditional college age and live on or within walking distance of campus. A traditional instructional delivery system of daytime, campus-based courses is prevalent.

In December 1986, Radford University was approved to offer a non-traditional baccalaureate degree program for adult learners. The Adult Degree Program leading to the Bachelor of General Studies degree began accepting students in June 1987. Presently 54 students are actively enrolled.

The hallmark of the interdisciplinary program is flexibility both in the way credits may be earned and in the design of the student's curriculum of study. Working with the Coordinator of Adult Learning Services, adults determine a central focus for their program and choose appropriate courses for their BGS Concentration (major). Coursework to complete General Education requirements and electives is planned to be complementary to the BGS Concentration. All students must also complete a BGS Final Project.

A minimum of one-fourth of a student's curriculum must be taken at Radford University. Other options for earning credits include coursework at nearby institutions such as community colleges, independent study through correspondence work offered by NUCEA institutions, CLEP exams and portfolio assessment.

Throughout their course of study, the adults receive an extensive amount of academic advising/counseling from the Coordinator of Adult Learning Services to assist and support them as they choose the options to plan their degree program. Pierson and Springer (1988, p. 23) found that adults come to school with "...highly diverse backgrounds and with varying degrees of clarity about their career, life, and educational goals." Despite surveying only adult learners who might be perceived as self-sufficient, 72.8% of their respondents still thought academic counseling was "very important or important (p. 22)."

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Pat Kuiken, Coordinator of Adult Learning Services. Peter P. Balsamo, Director of Continuing Education and Associate Professor of Education. Office of Continuing Education, Radford University, PO Box 5814, Radford, Virginia 24142

Through the Adult Degree Program, Radford University is making an effort to be responsive to the special needs of many residents of western and southwestern Virginia who would like to continue their education. Pierson and Springer (1988, p. 23) note, "most people who seek a nontraditional degree today are adults who have interrupted their education and now wish to resume it." One area of concern for these adults is the time factor. Spratt (1984) found that adults feel they must prove themselves competitive and worthy in the classroom. That effort is complicated and becomes a source of stress because of their limited time available for educational pursuits in view of their career and home responsibilities.

Shannon (1986) also found time considerations to be important. Adult learners place great weight on external factors like family obligations and job requirements when making decisions for themselves such as how many hours to carry. Young's research (1984) supports Shannon's in seeing multiple commitments beyond educational pursuits as a major difference between traditional students and adult learners. Adults are responsible for themselves, but frequently for others too. They may fill several roles beyond student--worker, spouse, parent--so formal education is one of several conflicting and/or competing priorities.

Thus, efforts to save time for adults such as simplified admissions, business offices with evening hours and streamlined registration are a sensitive response for an institution to make. These are all considerations incorporated into Radford's Adult Degree Program.

Another area for examination is effective scheduling of courses to offer classes at times adults are able to attend. In a recent survey conducted by the Radford University Continuing Education Office, 68 percent of students in our Adult Degree Program indicated that they can only attend evening courses. Radford University has enough evening offerings to cover basic General Education requirements; however, for the more specialized upper level courses, classes are usually offered only during the day. In some instances, departments will "look out for their own" and make special arrangements for a student needing evening classes who is nearing graduation. But for the adult learners seeking the Bachelor of General Studies degree, no department or college views them as "one of their own."

We claim as an institution to offer the degree, but can our adults feasibly earn it without upper level evening classes? At the same time, how can a university with the size and setting of Radford economically offer enough evening courses to accommodate the varied demands of adults creating interdisciplinary degree programs? Therein lies the dilemma we are attempting to address with our track model.

The Track Model

When we began enrolling students in the Adult Degree Program last June, we expected great variety in the degree programs they would create. Instead, experience has shown that the overwhelming majority of our students, both those actually in the program and potential students inquiring into the program, are interested in curricula falling into one of three broad areas.

For example, 60 percent of the 54 adults currently in the program have designed very similar concentrations emphasizing oral, writing and people-to-people communication skills for use in the workplace. Another area of interest is an interdisciplinary approach to social services. The third area we are seeing is the health care worker who wants to earn a bachelor's degree in health care services to complement the technical skills acquired in a two year degree program such as radiology technology.

Our track model seeks to make use of the lessons our experience has taught us to solve the dilemma of how to economically offer an appropriate selection of courses at night. Working with the university's administration and the departments involved, we are currently designing tracks of curricula encompassing 30 to 36 semester hours of upper level coursework in two of these three areas. A cohort of approximately 35 carefully selected students will enter a track as a group and proceed through it over a three year period attending evening classes twice a week during the traditional academic year. The classes will be sections of regular Radford University courses opened exclusively for the cohort group.

For students in the track, the selection of courses will become their BGS Concentration. While they are losing flexibility in designing their Concentration, they will still have varied options for their General Education and elective requirements. The courses to be offered during the three year cycle are guaranteed and will most likely be offered on the same two evenings throughout the cycle. Students will have the option of taking the summers off or using that time to work on other degree requirements utilizing any of the ways of earning credit permitted in the program.

Faculty will be regular professors teaching these sections as a part of their regular load. With the administration's support and proper justification from the department chairperson, funds are being made available for the hiring of adjunct faculty to relieve professors involved with the track project of lower division class loads. In some departments, it may be possible for the extra section of the course to be assigned to faculty as regular load without the necessity of hiring any adjuncts.

As with Radford's nationally acclaimed "Writing Across the Curriculum" program, there will be an extensive faculty development component. The first track is scheduled to begin in Fall 1989. By Fall 1988, the faculty participating will have been selected by their chairs on the basis of their areas of expertise and their interest in working with adult learners. During Fall 1988, the faculty will be involved in several workshops dealing with adult development and adult learning . styles. One goal of this portion of the project is to promote camaraderie and a sense of teamwork amongst the faculty. Throughout the three year cycle, the faculty will continue to meet as a group for professional growth and development.

Also during Fall 1988, the marketing and recruitment program will begin. By Spring 1989, the selection of applicants will have been narrowed, and the final decision concerning students to be admitted will be made by the Coordinator of Adult Learning Services and the faculty involved with the project.

Development of the Curricula

In considering what shape to give the tracks and what courses to include, a great amount of input came from our students and their actual experiences within the work force. Adults with appointments for academic advising were indirectly letting us know what their and their employer's needs and interests were. Many of our students already possess the necessary technical skills and knowledge for a career in their chosen field. What they lack is "the piece of paper" validating that experience and a good, theoretical academic foundation.

The first track to be designed was the "Workplace Communications" track. Nearly 60 percent of all adults interested in the BGS degree are also interested in a degree program emphasizing basic managerial skills, oral and written communication skills and interpersonal relations skills. Based on the input from the adults in the program, the Coordinator of Adult Learning Services designed a proposed curriculum involving coursework in Communications, English, Psychology and Sociology. Several reviews and revisions were made by the Coordinator and the department chairs and the curriculum has now been finalized. Coursework includes technical and business writing classes, introduction to public relations, social psychology and the psychology of work behavior, several courses from speech, psychology and sociology on small group leadership and interaction, and sociology classes on minorities and work, organizations and society. Students will be encouraged to take principles of management and human resources management, although those courses are not part of the track itself.

The second track we are considering is the one in Health Care Services and for that we are pursuing a different route to developing the curricula. A draft curricula has been proposed from existing Radford University coursework in Communications, English, Health, Nursing, Psychology and Sociology. We are now in the process of consulting with various Area Health Councils and health care administrators to gather professional input on the curricula and delivery format. It is possible for this track that one or more new courses may need to be designed.

Delivery Systems

The Workplace Communications track is scheduled to begin as a campus-based evening program. Assuming that is successful as a pilot project, we are considering a traditional, off-campus expansion to the Roanoke Valley. Simultaneously, the track could be made available at various sites throughout rural southwestern Virginia by using telecommunications. Additional funding from outside sources would be needed to accomplish that expansion for the telecommunications equipment and extensive faculty development.

The telecommunications would probably involve audiographic teleconferencing and limited weekend sessions on the Radford campus. The sites would be located at community colleges in southwestern Virginia and each cooperating community college would receive an audiographic system. When not in operation for the Radford courses, the community college could use the system for their own instructional programs.

The audiographic system allows the computer and telephone to be connected together to deliver instruction simultaneously to several locations. This unique "electronic blackboard" system allows students and faculty to talk to each other and see each other's writings on their computer screens while connected only by a single telephone line.

For the Health Care Services track, we plan to offer that initially in the Roanoke area and also simultaneously through the telecommunications system throughout southwestern Virginia.

Conclusion

Time is an important factor for adult learners. It must be given consideration when choosing program alternatives that will attract adult students and make it possible for them to pursue their educational objectives.

> Adults cannot attend at the traditional sites and during the normal hours of operation. The overall issue of academic adaptations to meet adult student

> needs has significant impact on the enrollment of adult students...Most adults do not have the luxury of quitting work and attending school on a full-time basis. Therefore, they see the ability to pursue a degree while working as very important (Pierson and Springer, 1988, p. 22).

Institutions similar to Radford University may face a comparable dilemma to Radford's if their routine selection of upper division evening courses is limited. For such schools, the track model may provide a very workable solution. With that benefit alone, the model is worth considering. Yet, there are other indirect benefits for students and faculty.

Students have the comforting reassurance that all the courses they need will be available to them. Further, they have the opportunity to study over several years with essentially the same group so they will have a familiar support network of their peers. At the same time, the adults will benefit from the camaraderie displayed by the participating faculty members. Instead of independent courses unrelated except perhaps by academic content, these students will sense a connectedness throughout their studies in classroom atmosphere as well as subject matter.

Of course, the faculty will benefit from the opportunity for professional growth through the development component of the project. Professors who enjoy working with adults may welcome the change of milieu in a classroom filled exclusively with highly motivated, carefully selected older students. Beyond the variance in challenge and stimulation also exists the possibility for professional research.

The track model is not appropriate for all adult learners or even for all schools, but it is a sensible, workable solution for many with indirect benefits for participants. Leach (1984, p. 9) states, "the index of optimism at most institutions of higher education in the years ahead will be directly proportionate to their ability to attract, serve and satisfy the educational needs of increasing numbers of adult students." The track model can surely enhance that level of satisfaction and index of optimism.

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INNOVATIVE UNDERGRADUATE CURRICULUM: AMERICAN HUMANICS MODEL

Daniel L. McDonald, Marcia Jean Carter, Joseph L. Wilson

The traditional undergraduate professional preparation curriculum approaches in leisure studies appear to adequately train students in the technical areas such as leadership, leisure content and fundamentals of budgeting, scheduling, program design, and office management systems. Many educators and practitioners believe that some tools essential to delivery of leisure services are more appropriately developed through practical experiences. Skills such as marketing, problem-solving, decision-making, interpersonal communication processes, personnel management, and personal development are perceived as being acquired during experiential learning afforded by on-site exposure and field placements. The acquisition of these types of skills has become more significant in recent times as a result of the employment market shifting from a traditional product oriented economy to one focusing on information dissemination and human services. An avenue to incorporate professional education and practical experience leading toward employment in a service oriented economy is the design of an undergraduate program at the University of Northern Iowa using the American Humanics Consortium Model.

The American Humanics program has been in existence since 1948. H. Roe Bartle, the founder, coined the phrase "humanics" in order to describe the "mechanics" of working with people. The mission of American Humanics Inc. is to recruit, educate, and facilitate employment of certified graduates in entry-level admininstrative positions within the youth/human service sector. The objectives are: 1) providing career-oriented college education for individuals who either aspire to or are employed in professional positions; 2) facilitating specialized training opportunities in continuing education for professionals and volunteers; and 3) serving as a cooperative center to facilitate effective utilization of agency resources for all voluntary youth and human service organizations. American Humanics represents a consortium of eleven youth-serving/human service agencies; American Red Cross, Boys Club of America, Camp Fire, Girl Scouts of the USA, YWCA of USA, 4-H, Big Brothers/Big Sisters of America, Boy Scouts of America, Girls Clubs of America, Junior Achievement, and YMCA of the USA. This cooperative effort results in the preparation of entry level managers who may choose to seek employment with one of the sponsoring agencies where there are an estimated 3000 new positions annually.

To bridge the gap between traditional curriculum design and competencies and innovative preparation strategies, a unique set of contingencies outlined by American Humanics must exist within the undergraduate environment. These contingencies are found in the administration, curriculum, faculty and student-orientation of the system.

Administration

An entrepreueral interactive leadership style must prevail at administrative levels. While focusing on their product, the student, administrators must encourage and support faculty who adapt a risk-taking philosophy so they serve as change-agents within the community at-large.

Curriculum

Structure of curriculum offerings must allow students to combine the benefits of arts and sciences, professional education, and practical experience. An individualized instructional approach supports subjective as well as objective student outcomes.

Faculty

Faculty must function as facilitators as well as academicians with credentials in education, field experience and professional development. Accountability measurements of the system must acknowledge faculty production of empirical and applied research in the human service sector. Interdisciplinary endeavors rather than turfism must prevail among a commited core of faculty representing the total fabric of the university.

Student

The whole student becomes the focus of attention with the implementation of an innovative curriculum. Service learning activities become just as significant as the results of traditional curriculum experiences. The student can choose service learning opportunities congruent with their long-range professional goals. Through these experiences students are more appropriately prepared for long-term employment in the service-oriented economy.

The model purported by the American Humanics Consortium offers an innovative approach to curriculum design which facilitates the development of the identified skills necessary to be successful in today's emerging service oriented economy. The American Humanics Model uses the expertise provided by college faculty to offer curriculum in youth/human service agency administration coupled with the experience of community based administrators to provide co-curricular experiential education. Colleges and universities selecting to utilize this model house the program where appropriate within their systems. The University of Northern Iowa (UNI) realizing this model would bridge the gap between professional theoretical education and practical experiences is one of 15 universities that has entered into a cooperative agreement with American Humanics. The other universities include: Arizona State University, California State University/Los Angeles, Colorado State University, Georgia State University, High Point College, University of Indianapolis, Murray State University, Missouri Valley College, Pace University, Pan American University, Pepperdine University, Rockhurst College, Salem College, and University of San Diego.

The University of Northern Iowa has placed this model in the recreation division. The competencies defined by the American Humanics Board are congruent with standards and evaluative criteria of the National Recreation and Park Association and American Association of Leisure and Recreation (NRPA/AALR) Council on Accreditation (COA). UNI's accredited recreation curriculum incorporated essential American Humanics competencies. These competencies resulted in the enhancement of one core course and development of four courses specific to the youth/human service sector. The core course was enhanced with the addition of the study of interdisciplinary relationships among youth and human service agencies in the community. Four new course areas included systems design and management, marketing and fund raising, fiscal management and volunteer management in the non-profit sector.

In addition to the new course offerings, and the required 500 volunteer hours and 560 practicum hours, a co-curricular program has been instituted to provide experiential learning opportunities including workshops, seminars and training sessions taught by agency executives. Also students participate in an annual national American Humanics management institute. These didactic experiences combined with the class offerings enhance the employability of graduating students. Students develop potential employment contacts, assess particular career choices and apply competencies while involved in an inter-agency educational venture.

Several innovative features have resulted from the implementation of the American Humanics Consortium Model. The private sector becomes a partner with the public sector in the educational process. Corporate America finances the national American Humanics management institute while also providing their top-level CEO's to conduct leadership workshops and seminars. Traditional student recruitment, placement, and funding methods are augmented by the non-profit sector. Youth and human service agencies selectively recruit potential college students, prepare student placement documents, distribute loans and scholarships and support personnel searches. This approach assures the extension of the university placement services in depth and scope. Students gain exposure to a variety of recreation positions in community-based programs nationwide. Students who choose to make application are eligible to become certified by three national programs: American Humancis, National Recreation and Park Association and the National Council for Therapeutic Recreation Certification. The American Humanics Consortium Model benefits the four components of the undergraduate environment. The administration is provided a vehicle to enhance its three-fold mission of teaching, service, and research. The curriculum is enhanced by the innovative interdisciplinary approach to education. Through facilitating the student's practical experiences, faculty are more fully in touch with the professional community permitting them to remain cognizant of the changes in the practice of the leisure profession. With such a curriculuum the universities' graduates, are more attractive to employers. The graduates possess tools that are tranferrable to a service oriented economy. Through the provision of qualified entry-level administrative practitioners, the community is the ultimate benefactor of the American Humanics Consortium Model.

METALS: HISTORY, SCIENCE & ART
(AN INTERDISCIPLINARY GENERAL STUDIES COURSE)

by Philip Pankoewicz

Overview of General Studies at Stockton

The General Studies curriculum at Stockton is designed to provide breadth of understanding beyond the student's major, and in this sense its goals are similar to distribution requirements in general education in any liberal arts college. But Stockton has established a separate curriculum and division of General Studies because of the belief that breadth of education is not well served by simply requiring students to take introductory courses in other disciplines.

Traditional introductory courses in most disciplines are usually designed as the first step in a major or sequence of specialization, rather than providing breadth of understanding for the non-major and general student.

At Stockton, General Studies courses are intended to enrich one's learning, to provide for explorations of new fields, to provoke and stimulate new thinking, to encourage experimentation, and to test one's perspectives. The General Studies course offerings are taught by all members of the faculty in all divisions. They may study a problem or theme or offer a survey of related topics. What the courses have in common is that they are designed to explore ideas, stimulate critical thinking, and provide breadth for the general student.

Because General Studies courses are not a mere set of introductory courses in various disciplines, they are viewed as an ongoing process, from freshman to senior year. Learning is a life long process, and as such, one of the most important abilities a student can develop is the capacity to plan and manage learning experiences. At Stockton, the student's preceptor should play an important role by helping the student develop this ability in the major and in general education courses.

Philip Pankiewicz
Assistant Professor of Science Education
Stockton State College
Pomona, NJ 08240

GENERAL STUDIES COURSE CATEGORIES

General Studies courses are divided into five categories which explore broad areas of knowledge, often in interdisciplinary or multidisciplinary ways.

GAH	General Arts and Humanities (GAH) courses are designed to acquaint students with the arts and humanities and provide various cultural perspectives on the past and present.
GNM	General Natural Sciences and Mathematics (GMN) courses examine the broad concerns of science, explore the nature of scientific process and practice, and seek to provide an understanding of mathematics and the natural environment.
GSS	General Social and Behavioral Sciences (GSS) courses assist students in understanding human interactions - how people live, produce, and resolve conflict as individuals and as groups. They focus on topics, problems, and methods of concern to the social sciences.
GEN	General Interdisciplinary Skills and Topics (GEN) courses emphasize the dynamic nature of education. They develop learning and communication skills, explore experiential ways of knowing, or examine topics which cut across or lie outside traditional academic disciplines.
GIS	General Integration and Synthesis (GIS) courses are advanced courses for juniors and seniors which are designed to show the interrelationships of various areas of study. They are intended to gain perspective on the self, on disciplines of learning, and on the recurrent concerns of humankind. The requirement that students take at least four credits of GIS course work is an attempt to help them bring together their earlier General Studies experiences into some kind of integrated framework.

GRADUATION REQUIREMENTS

Bachelor of Arts

The student must complete 64 credits distributed for a B.A. as follows:

-8 credits from GAH offerings
-8 credits from GNM offerings
-8 credits from GSS offerings
-4 credits from GEN offerings

-4 credits from GIS offerings
-a combination of 32 credits from designated "General Studies" (G acronym) courses and non-cognate Program Studies courses "at some distance" from the student's major program to be selected in consultation with his/her preceptor.

The student may not apply more than 16 credits toward a B.A. in any G category.

Bachelor of Science

The student must complete 48 credits distributed for a B.S. as follows:

-8 credits from GAH offerings
-8 credits from GNM offerings
-8 credits from GSS offerings
-4 credits from GEN offerings
-4 credits from GIS offerings
-a combination of 16 credits from designated "General Studies" (G acronym) courses and non-cognate Program Studies courses "at some distance" from the student's major to be selected in consultation with his/her preceptor.

GEN 2315 — METALS: HISTORY, SCIENCE & ART — FALL 1987

Instructor: P.Pankiewicz   Office:C141 X4411   Messages: X4546

COURSE DESCRIPTION

OBJECTIVES: This course will explore how civilization has been shaped by our use of metals. It will trace the use of metals from the early Bronze Age to modern times. The course will be divided into three parts: History, Science, & Art. It is designed to help students understand the importance of metals in their lives.

PREREQUISITES: Students should have some basic algebra skills. A college or high school course in chemistry would also be helpful.

TOPICS:

- History-
  - Stone Age to Copper
  - The Rise of the Bronze Age
  - The Iron Age
  - The Industrial Revolution
  - The Machine Age
  - The Age of Metals: Can it Last?
- Science-
  - Chemical Properties of Metals
  - Physical Properties of Metals
  - Identification of Metals (Lab Oriented)
  - Alloys
- Art-
  - Early Sculptors
  - Modern Sculptors
  - Metal Working Techniques for Craftsmen/Artists

TEACHING TECHNIQUES: CLASS FORMAT The History portion of the course will be mainly lecture and directed discussions. The Science portion will involve some lecture along with a substantial amount of laboratory work. The Art segment will include some lecture and A-V presentations, two field trips, and some guest speakers.

READINGS:ASSIGNMENTS The primary textbook for the course is OUT OF THE FIERY FURNACE (Raymond). Assignments will be given after each class session (see attached syllabus). Various print-out materials will be used for the Science and Art portions of the course.

QUIZZES/EXAMS: Three Exams will be administered at the end of each section (see syllabus). No quizzes are anticipated.
PAPERS: Three papers are to be handed in, one at the end of each of the three sections. These are not to exceed more than four pages in length. Further details will be provided.

EVALUATION

EXAM GRADES: 3 @ 15% = 45%
PAPERS: 3 @ 15% = 45%
ATTENDANCE & LAB PARTICIPATION: = 10%

** A missed Exam may not be made up after the session in which it is given. If you know, in advance, that you are going to miss an Exam, see me as soon as possible.

** Papers are due on the dates indicated on the syllabus. Late papers are not acceptable.

GNM: 2315 - TENTATIVE SYLLABUS - FALL 1987

ATE	CLASS ACTIVITIES	READINGS
/8	From Stone to Copper The Rise of Bronze	Out of the Fiery Furnace Chapters 1 & 2
/10	Bronze Gives Way to Iron Swords & Plowshares	Out of the Fiery Furnace Chapters 3 & 4
/15	Shining Conquests A World-Wide Contagion	Out of the Fiery Furnace Chapters 5 & 6
/17	The Revolution of Necessity The Steam & Steel Revolution	Out of the Fiery Furnace Chapters 7 & 8
/22	Into the Machine Age	Out of the Fiery Furnace Chapter 9
/24	From Alchemy to the Atom	Out of the Fiery Furnace Chapter 10
/29	The Age of Metals: Can it Last?	Out of the Fiery Furnace Chapter 11
0/1	Exam I History of Metals (* Paper 1 due)	
0/6	De Re Metallica Books I, II, III	
0/8	De Re Metallica Books IV. V, VI	
0/13	Modern Mining Techniques	
0/15	Geology Lab (B013) Identifying Common Metallic Ores	
0/20	Atomic Structure & Chemical Properties of Metals	
0/22	Physical Properties of Metals	
0/27	Lab: Identification of Metals Part I	
0/29	Lab: Identification of Metals Part II	
1/3	Lab: Scientific Measuring Techniques	
1/5	Exam II Physical & Chmical Properties of Metals (* Paper 2 due)	
1/12	Sculpture I	
1/17	Sculpture II	
1/19	Independent Study or Project (possible guest lecturer)	
1/24	Philadelphia Trip : Rodin Museum & Museum of Art	
2/1	Metal Working Techniques for Artists/Craftsmen	
2/3	Metal Working Techniques for Artists/Craftsmen	
2/8	Princeton/ Mercerville Trip : Johnson Atelier	
2/10	Independent Study or Project (possible guest lecturer)	12/15 Exam III Paper 3 12/17 Course Wrap-up

Course Revisions

There will be revisions to the course for the Fall 88' semester. While one class section will be open to all undergraduates an additional class section will be added for Freshmen only. This new section will keep the same course title (Metals: History, Science & Art) but will take on a completely different format, that of a Freshman Seminar.

What is a Fresman Seminar?

It's a class just for freshmen. . .

These classes are distinctive in several ways, some because they are just for freshmen, and some because they are seminars. They will, first of all, have a number of features appropriate to their common goal of introducing students to the academic community and academic life. For example, they will pay special attention to the distinctive ways of learning appropriate to college, and help students strengthen their skills as active learners. Seminars will also provide introductions to various areas of the curriculum and to the ways in which these areas are related to each other. In this way they will provide a foundation for students' later study and help them better understand the entire Stockton curriculum.

The experience of participating together in the seminar will strengthen ties among freshmen, providing a place to make new friends in an academic setting and to share experiences and reactions.

. . . And it's a seminar. . .

Since these are seminars, they will be small classes, which will offer the students the individualized attention of their teachers. Every student will have the chance to be actively involved in the class. As in any seminar, these courses will pay close attention to written and oral communication, and to critical reading and listening. Students will learn from each other as well as from instructors and readings, and will gain confidence in their ability to participate in a learning community.

All freshman seminars will pay particular attention to the key skills of critical thinking. They will study reasoning and argument, as found both in the course readings and in the ideas presented by the students themselves. Whatever the topic of the seminar, students will learn not only the information and ideas appropriate to it, but also how these are related, how ideas build on each other and how various solutions to issues and problems are evaluated.

What is it about?

Freshman seminars will have many different types of subject matter. They are taught by Stockton faculty from various academic areas, and their topics will range from literature to politics to the energy problem. They will deal with issues and ideas that have been of enduring importance to people in the past as well as having contemporary relevance. Students will have the opportunity to choose their seminars from the selection offered each year. At times, groups of seminars with related topics may meet together for a discussion, a debate, a special lecture, or a co-curricular activity.

Is it a requirement?

Every freshman or transfer student with fewer than 16 credits is required to pass a freshman seminar. This requirement can be met at the same time that the student meets other college requirements--either in basic skills or in General Studies.

1. Some students, on the basis of the New Jersey College Basic Skills Placement Test, are required to take and pass BASK 1102, Critical Thinking. This course will serve as the freshman seminar for those students. It counts fully toward the graduation requirement for courses at a distance from the student's major, and like other freshman seminars it can have a variety of topics.

2. All other students will take seminars that are offered within one of the General Studies categories in which students already have requirements; thus completing the seminar will also be a step toward fulfilling another graduation requirement, regardless of what major the student chooses.

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Stockton State College 1986-1988 Bulletin

Report from the Stockton State College General Studies Committee 1988

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Developing Individualized Undergraduate Curricula

by

James S. Pula

As enrollment of adult students continues to bolster otherwise declining numbers of college students, institutions have introduced "non-traditional" approaches to meet the special needs of this student population by offering courses during evenings and weekends, scheduling courses at work sites and other easily accessible locations, and permitting accumulation of academic credit for experiential learning. In most instances, however, these innovations have not been extended to content and curricular revision to individualize the educational goals of this non-traditional student body. This paper will describe one such attempt to create an individualized, student-centered curriculum at the State University of New York at Binghamton.

The School of Education and Human Development (SEHD) is a multi-purpose college providing a diverse array of career and interdisciplinary programs for undergraduate, graduate and continuing education students. The School was originally intended to serve part-time, commuting undergraduate adult students. It was, and still is, primarily an upper division school serving transfers from two-year colleges as well as adults who had interrupted their college careers. Most courses are at the junior and senior level and are offered in late afternoon or evening.

The School's approach to education emphasizes the translation of theory into practice. Therefore, the degree programs at the undergraduate level take an interdisciplinary approach to learning. Degree programs are "problem-centered" as opposed to the more traditional discipline-centered focus.

The School continues to serve part-time and community adults who wish to continue their education both in their graduate and undergraduate programs. In addition, in recent years the School has also seen its population of "traditional" students expand rapidly. This change has brought an intergenerational as well as an interdisciplinary aspect to the School.

It was in response to this diverse and changing population that the faculty saw a need for some major changes in the undergraduate curriculum in the CIS Division. The original curricula provided flexibility but were structured in a way that tended to encourage the "Chinese menu" approach to learning. For example, in the B.S. in Applied Social Sciences students were asked to choose two courses in three areas in the social sciences and to choose a twelve credit concentration in the social sciences which could be in one of the three areas already chosen or in a completely different area. Students were forced in choose "two of these and four of those" rather than encouraged to look for the interrelationships between certain areas in the social sciences and the career concentrations. The degree program was fragmented rather than integrated.

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After a faculty retreat on curriculum development, a new curriculum emerged. This curriculum was based on students developing a statement of educational objectives and choosing courses that would meet their educational and personal needs. Seven learning outcomes were also to be integrated within this statement of educational objectives. Faculty-student mentoring was the foundation of this program. This model retained flexibility, yet it now appeared to embody the interdisciplinary approach to learning that the division desired for its students.

The two basic premises under which the Division operates are that the transfer and community populations consist of individuals who (l) each have their own set of unique educational, career, and life experience, and who (2) each have their own set of unique personal and career goals. Given the fact that, unlike the traditional case of the high school graduate who moves immediately on to higher education, the adult population to be served does not have a relatively homogeneous educational or experiential level, it appears obvious that any degree program designed to serve this group must acknowledge and accommodate wide variances in educational preparation, work experience, family responsibilities, and other factors which make for a very heterogenous group. If the University is, in the words of the recent Carnegie Commission report, to "put the needs of the learner ahead of the needs of the institution," these factors need to be reflected in both a flexible admission policy that provides alternative entry criteria and a flexible curriculum which recognizes that each participant does not enter equipped with roughly equivalent knowledge and skills.

The Division of Career and Interdisciplinary Studies (CIS) offers baccalaureate degrees in liberal studies, social sciences, and applied social sciences. As a means of addressing the unique needs of its transfer and community clientele, the curricula of each of these degree programs is designed to promote the maximum degree of flexibility by encouraging students to design their own individual plan of study that will enhance both personal and career development.

The CIS Division is deeply committed to an interdisciplinary approach to learning which integrates classroom education with the practical application of knowledge and skills. The program emphasizes the acquisition and refinement of skills for graduates to become problem-solvers, decision-makers, and leaders in their chosen fields. With this in mind, the faculty of the Division have identified seven essential learning outcomes which all students should attain prior to graduation. These include:

1. *Literacy*: The ability to write, speak, read, and listen clearly.

2. *Critical Inquiry*: The ability to think logically and engage in critical analysis from an interdisciplinary perspective.

3. *Social Perspectives*: An understanding of the historic antecedents and current forces that shape our lives and influence our beliefs and actions.

4. *Multi-cultural and International Perspectives*: An ability to view the world from cultural perspectives other than one's own.

5. *Social Responsibility*: The development of values that enhance human dignity and justice and reduce social harm.

6. *Empowerment*: An enhanced sense of personal autonomy and initiative that flows from the process of learning.

7. *Self-Directed Learning*: An ability to define and pursue learning needs throughout one's life.

The learning outcomes noted above are implemented through the required courses, and by addressing each specific learning outcomes in developing the syllabus for every course taught within the Division. Obviously, not every course can address every learning outcome, but an attempt is made to stress discussions and classroom assignments which will enhance the outcomes which the faculty have identified.

All three degree programs require 120 semester credits, 24 of which are "residency" requirements and 42 of which must be upper division (junior-senior level) course work. There are only three required courses for the degrees in liberal studies and social sciences, and four in applied social sciences. The include:

1. *CIS 200: An Introduction to Career and Interdisciplinaty Studies*. This is a one-credit course which students are scheduled to take in either their first or second semester on campus. Its purpose is to familiarize students with the University and its resources, with the requirements for the self-designed curricula, and with the options available to them. During the semester in which the class is taken, students consult with their faculty advisors to plan their individualized program of study.

2. *CIS 300: Critical Thinking and Discovery*. This three-credit course is designed to develop skills in logic, critical inquiry, argumentation, and analysis. It includes written, oral, and group assignments to promote literacy and critical thinking.

3. *CIS 400: Senior Seminar*. In the three-credit Senior Seminar, students develop a "senior thesis" on a topic related to their personal or career goals. The course deals with research methods, literacy, and critical inquiry necessary in decision-making and leadership role.

4. *CIS 230: Statistical Analysis*. Students enrolled in the Applied Social Science major must also take a three-credit course in statistical analysis. This course emphasizes an understanding of the meaning and application of various methods of statistical analysis commonly used in the social sciences.

Aside from these requirements, the student is free to design a unique plan of study by selecting courses from any of the five schools and colleges on campus, and by incorporating such other credit options as independent study, internships, transfer credit, credit by examination, experiental learning, and credit for corporate and other non-university education.

In each of the majors, students are asked to design a program which combines the study of (1) the background of social issues and human concerns, (2) the current context of social action, and (3) personal competencies contributing to effective work in the student's chosen social setting. These may be explained as follows:

1. Whether a student's immediate pursuit is one of effective supervision in a factory, starting a halfway house for the mentally retarded, or designing new training programs for family care providers, the decision requires some examination of the social, technological, and other historical developments which reflect on the tasks and problems the student will encounter. Understanding the evolution of current work and social situations helps to guide analysis and leads to greater appreciation of the traditions, culture, constraints, and opportunities that shape human choices.

2. The Division encourages understanding of the multidimensional forces currently influencing business, criminal justice, health systems, human services, or other social concerns. Students may focus on the broader systematic contexts of organized human endeavor such as processes of industrialization and urbanization, or the impact of technology on society, or they may elect to focus on more immediate contexts such as organizational environments, supervision practices, or the impact of client alienation on the delivery of human services.

3. The Division encourages all students to devote some attention to the development of skills and competencies which will enable them to transform knowledge into action. These skills are important to increasing the effectiveness of the student in both social and career environments.

In order to integrate the acquisition of knowledge with its practical application to career paths, the CIS Division offers six "concentrations," along with the opportunity for students to design their own individual concentration to meet their special needs. Each concentration provides a coherent plan of study for those who have educational or career interests in the areas such as American Studies, Business, Criminal Justice, Health Systems, Human Services, or Peace Studies.

From the administrative perspective, the flexible, self-designed curriculum model offers both advantages and disadvantages. The student-centered nature of the program provides a responsiveness to real education needs, while at the same time allowing the student to "buy into" development and implementation of the educational plan. This incentive has led to a very high rate of completion, and to excellent student opinion reviews. Further, the identification of real goals, the evaluation of individual strengths and weaknesses, and the development of a plan based upon these assessments, makes the entire educational process more meaningful to the student both as a student and as a graduate applying for career positions.

On the negative side, there are disadvantages which should not be viewed lightly. The nature of the self-designed curriculum places heavily reliance upon extensive interaction between faculty and students, thus making it very "labor intensive." An institution short on resources and faculty should think twice before embarking on such a program. Similarly, because of the heavy reliance on faculty-student interaction, it is important that the faculty "buy into" the program and be willing to devote the time required to provide quality advising services.

THE UNBEARABLE LIGHTNESS OF THE CURRICULUM: RATIONALE FOR AN INNOVATIVE INTERDISCIPLINARY HUMANITIES PROGRAM, 'ARTIFACTS OF CULTURE.'

George L. Scheper

We have all heard the rather cynical truism that there are good reasons for everything we do, and there are real reasons -- in fact, I'm sure that there are good and better, real and more real reasons, with every imaginable gradation, as well as all manner of serendipidy, mischance , coincidence and Zeitgeist at work in everything we do. So the fact is, that in describing the genesis and rationale of the "Artifacts of Culture" program at Essex Community College, a curricular innovation that has dramatically altered and reformed my professional and even personal life, and that of my colleagues and the hundreds of students who have been involved in the program over the past eight years, I am hard put to sort out the 'real' and the 'good' reasons for inaugurating it, the initial enthusiasms and the subsequent hindsights, or whether to put first the ways in which the program was designed to serve the profession, or to service the needs of our students or of our institution, or indeed to fulfill the vocational dreams of a few teachers who could not make their peace with a curriculum which no longer resonated with their inner vision. However it came about, through whatever tangle of mixed motivations, fond imaginings and sheer circumstance, what I wish to share with you is a curriculum design that has in fact returned those of us who have participated in it to our original sense of what liberal education is all about, reminded us why we entered the profession in the first place, and restored to us a large sense of what, after all, is possible. I say "after all," because the voice that comes from professional educationists all too often is a call to serve statistically and bureaucratically defined institutional purposes. There are always compelling reasons put forward for pulling in our dreams and serving these seeming-practical purposes, but from traditional Yiddish wisdom we can learn the important words, "and yet": "All this may be so -- and yet...."

So, it may be true that enrollments have declined, that the balance has increasingly shifted from the liberal arts to vocational and career-based training, that educational institutions have more and more come to be operated on managerial principles of zero-based budgeting, systems-analysis, competency-based objectives and a hundred other graceless hyphenated buzzwords. And yet. And yet, we recall a not so distant voice of an educator and a poet reflecting that the aim of criticism -- and no less of education -- was to propagate the best that has been known and thought in the

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world, to learn to see the object steadily and to see it whole, and to contemplate it as in itself it really is. And so it was that in the spring of 1978 two weary but still hopeful teachers and one skeptical but willing to be convinced division chairman went to Orlando, Florida to go fishing, not for marlin but for innovative ideas at an NEH-sponsored curriculum-development conference. There, amid the usual mèlange at such events of good will and tedium and rather dreadful cocktail hours, a spark was struck, and after a year of planning supported by some released time, we applied for and received an NEH Pilot Grant to implement the curricular idea we had come up with, the Artifacts of Culture (a somewhat awkward sobriquet which has replaced our equally awkward but also embarrassingly sexist original moniker, the Artifacts of Man), a sequence of team-taught interdisciplinary one-credit courses ("modules") in humanities.

Our project design seemed to us in our initial enthusiasm highly original and full of bright promise -- and, in the rather unlikely turn of events, in hindsight, almost ten years and over sixty modules later, our enthusiasm, our sense of the originality and the bright promise have actually increased rather than diminished. Hence our desire to share and replicate the program. On the one hand, the Artifacts program was intended to address the notorious "plight of the humanities" that everyone was talking about in the late '70's, the national need for a renewed commitment to the liberal arts and a recognition of the centrality of cultural literacy (before that term acquired its current specific reference) -- and, on the other, to address our own sense, as teachers and scholars, of frustration with what I now cannot resist calling the unbearable lightness of the standard curriculum: its doggedreiterativeness, its disciplinary parochialism, its futile polarization of esoteric scholarliness and general education superficiality, above all, its loss of vitality and central vision -- all of which we thought we could see reflected in students' increasing alienation from the liberal arts ideal.

At the same time, post-secondary institutions seemed to be dealing with the problem -- if they dealt with it at all -- by following either a populist/pragmatic approach of redesigning the curriculum to reflect the apparent interests or 'needs' of the student body and/or the community or however the "clientele" was defined from moment to moment, or else a traditionalist/elitist approach that sought in one way or another to restore and reimpose the "great tradition" or "legacy." Subsequently, we have seen fervent advocacies of relevance, back to basics, critical thinking, reclaiming the legacy, cultural literacy and any number of other watchwords that have indeed contributed to the dialogue but have also become virtual shibboleths that have contributed to that futile and self-defeating polarization of "populist" and "elitist" approaches to liberal arts general education. In our Pilot Grant proposal we put forward a curricular model that we believed then and believe now cuts across this populist/elitist dichotomy or dilemma. Our thinking came to focus on a particular unexamined metaphor that seems to underlie almost everyone's assumptions about the design of the post-secondary curriculum in every discipline: that it should be structured like a pyramid. As we expressed it in the grant proposal:

> "A pyramidal model of learning is pervasive in undergraduate education, especially in the humanities, in which broad foundations are laid in the introductory courses, usually by means of extensive'surveys,' and then successively narrower focuses are introduced in succeeding electives. In the case of literature, for example, most students will take one of the survey courses, covering hundreds if not thousands of years, but only the relatively

> few students who go on to elect another literature course... will experience the more intensive study of a period or major author course; finally, only the very few students who go on to graduate school will ever have the experience of studying a single work intensively, in a graduate seminar.... And yet, ironically, it is precisely in just such intensive study where the real excitement and satisfaction of personal discovery in the study of humanities often first takes place. As a result, it seems to us, education in the humanities for most of our students remains a rather passive affair, based upon generalizations and critical concepts that are simply handed down by the textbook introductions or by the instructor. There is little opportunity for the student to encounter the primary materials (other than the assigned selections themselves) of humanistic study or to become familiar and conversant with a great work of the past as he or she is with the immediate environment of the contemporary culture./ Thus, what we are proposing is nothing less than an inversion of this usual pyramidal curricular model. By proposing to introduce students at the undergraduate level to the intensive study of a small group of selected artifacts -- each discussed and analyzed by a team of instructors from different disciplines -- we are operating on the hypothesis that a student in whom we presuppose no particular background or familiarity with the material can, through this approach, achieve a really competent level of discourse in criticism of the arts."

The pyramid may indeed be one meaningful approach to structuring liberal education, but it has come to be an unexamined premise. Why, when students' everyday lives offer virtually no reinforcement of the values represented by the liberal arts, and when their backgrounds give them no common frame of cultural reference, why the "survey" of English or American or World literature, or a genre-oriented "introduction to literature" should seem like a good idea as a place to begin or to found a higher liberal education, no one seems to ask. No one, it seems, questions whether the 'hermeneutical gap' between classic literature, art or music (and the critical traditions that have evolved around them), on the one hand, and the student sitting in class, on the other, is effectively bridged by a course in the Norton or Oxford Anthology of English Literature or its analogues in art or music. Does anyone ever ask whether, in the one, or two, literature courses most students will ever take in college, that a week on Chaucer, a couple of weeks on Shakespeare, a day or two on Donne, a week on Milton, and so on, can make any real sense at all? Can such literary zipless-bleeps (apologies to Erica Jong) be really thought by anyone to constitute significant encounters, let alone 'marriages,' between students and poetry? Octavio Paz has poignantly shown how the pyramid has functioned in a virtually world-wide context as a mechanism for and archetype of oppression, from Egypt to Tenotchtitlan, and it is perhaps no frivolous parallel to see the curricular pyramid as a fundamental impediment to the marriage of true minds, that is, to the spiritual marriage between the mind and the world envisioned in Wordsworth's Prelude.

There is no point in denying that the survey does serve some meaningful purposes, in particular that it answers to the sense that every student should have some sort of coherent "overview" of literary (or artistic, or musical) tradition. But this has come to over-ride every other objective, and led to the dead-end assumption that the survey and an elective or two is perhaps the best that can be hoped for for the liberal arts' share of the general distribution requirements. And we seem to have remained committed to this formula in an uncritical, even unthinking way: textbook companies have an investment in it, academic council and professional educationists seem to have an investment in it, and, saddest of all, professors who wish to cling to their 'lesson-plans' have an investment in it. But think for a moment of the stunning disparity between this survey-cum-elective recipe and virtually any of the traditional formulations of the object of a liberal education, such as the Arnoldian idea cited above that the primary purpose would be to bring about the encounter of the student with the best that has been known and thought in the world, and to make that encounter as informed as meaningful as we can, and to nurture the capacity of seeing the object as in itself it really is, and to see it steadily and to see it whole. The disparity between such an ideal (and the disparity is of course magnified in the case of more radical ideals involving social transformation or the transformation of consciousness) and the typical course in the Norton/Oxford/Whichever Anthology is almost too painful, and embarrassing, for words.Would anyone, in all seriousness, demur? But what usually comes next, in my experience, upon presenting this case, is the exasperated rejoinder that nothing else is possible, certainly no increase in the humanities' proportion among the general distribution requirements, and certainly not "at our school." So what can you do?

Our idea in inaugurating the Artifacts program at Essex was to try to go back to our vision of what liberal education was all about and, following Gropius' dictum at the Bauhaus, to "start from zero," with no prior assumptions about what the basic liberal arts course should look like, no assumptions about what had to be 'covered ' (in any case, we were more interested in uncovering than covering), no notion that there was some 'text' to choose -- or any other seeming choices that really were no choices at all. Starting from zero, we wanted our absolute priority to be the meaningful encounter of the student with the given cultural artifact. In earlier presentations of the design of this program, I was much taken to quoting Bartlett Giamatti to the effect that what the humanities are all about is the interpretation of texts, whether literary or otherwise: that is, that what we were really trying to teach was cultural literacy in its most comprehensive sense (without, of course, the Hirschian connotations that term has subsequently acquired): how to 'read' a given painting, symphony, building, or whatever. "A given" is the key phrase here -- for one can't really learn to 'read' painting or music, or architecture, or literature at large or in general (general knowledge, as Blake noted, is what idiots have). But, in learning how to read a given painting or building or whatever as a paradigm or case study, you not only learn ("you" here meaning teacher and student alike) the relevant heuristic context of that particular work, but also a critical vocabulary and critical methods that will be, more or less, useful in the encounter with other works with a specifically different but nonetheless related heuristic context. In such a way one can be said to be learning how to continue to learn about the humanities, to be readying oneself for ongoing encounters with music, art, literature.

Key to our approach, then, is that the Artifacts courses be intensively focussed, and that they be team-taught. In practice, we have worked with a 'modular' system of sequences of one-credit, five-week courses or modules, each module devoted to the study of a single cultural 'artifact' -- either a single work (such as Jefferson's Monticello or Picasso's "Guernica"), or a 'moment' in cultural history (such as the Bauhaus, or the WPA projects), particularly those that most invite study from an interdisciplinary perspective (or, to be more accurate, interdisciplinary perspectives). What this makes possible, we find, not surprisingly, is a more genuine encounter with the cultural artifact, and something more like the marriage of true minds and less like the zipless-bleeps and unbearable lightness of the Anthology courses. As for the centrality of interdisciplinarity, the plain truth is, as Philip Sbaratta has put it, with elegant simplicity: "we lead interdisciplinary lives" (38). Reality, we might add, is interdisciplinary. Alvin White, Director of the Interdisciplinary Holistic Teaching Learning Project at Harvey Mudd College, begins his explanation of his perception of the centrality of interdisciplinary study by citing Michael Polanyi's testimony that the act of knowing involves an "active... [and] personal participation of the knower in all acts of understanding," and White continues:

> "When I read these words I began to understand my own puzzlement and discomfort about teaching and learning. I became aware of the discrepancy between the subject as it exists in the classroom, and as it lives and grows in the imagination of real people. My awareness of the discrepancy was reinforced by Polanyi's description: /'...as we pursue scientific discoveries... on their way to the textbooks... we observe that the intellectual passions aroused by them appear gradually toned down to a faint echo of their discoverer's first excitement at the moment of Illumination./ A transition takes place from a heuristic act to the routine teaching and learning of its results... the impulse which in the original heuristic act was a violent irreversible self-conversion of the investigator... will... assume fianlly a form in which all dynamic quality is lost.... /We became convinced that the teaching that we doshould honestly reflect the interdisciplinary structure of knowledge" (71-2).

It is difficult to see how one could quarrel with the fundamental perception here, the first fact, as it were, of the "interdisciplinary structure of knowledge." When we think about what the disciplines are, starting from this first fact, what we find is not so much that they are partial, or incomplete, ways of looking at a subject, nor that they are 'aspects' of a subject, but rather, in Marjorie Miller's apt metaphor, that they are lenses, a variety of lenses available for examination of a given landscape. The first mistake, she argues, I think rightly, would be to regard education as a single lens, one which may be ground to maximize either the depth of focus or the breadth of field, but not both -- hence the apparent educational dilemma over 'breadth' at cost of 'depth,' and vice versa (101). The crucial thing is to realize that each discipline or stance is a complete lens, a certain way of viewing the whole subject, and that there are any number of other lenses which are also complete other ways of viewing the whole. Thus aesthetics (or science, or religion, or politics) is not an aspect' or section of life or reality, but rather a way of knowing or encountering all reality, all experience. There is thus not so much a 'political dimension' to health care, for instance, as a political lens for viewing health care entirely. There is not an aesthetic 'dimension' to Brooklyn Bridge, but an aesthetic lens for viewing Brooklyn Bridge entirely -- as there is an engineering lens, and a socio-political lens: the combination of stone gothic arches and drawn steel cables that consititutes the fundamental structure of the bridge represents at once an aesthetic decision, an engineering decision and a symbolic, socio-political decision. The point of interdisciplinarity is not to aspire to some chimerical holistic all-comprehensive 'big picture,' but rather to recognize and honor as many lenses as have a meaningful contribution to make to our understanding of a given landscape or artifact, each discipline being"a unique mode of querying the world- a unique lens through which to view it, a unique program with which to assemble a conclusion out of the vast data of our experience" (Miller, 107), our business being that of, as Miller says in her title, "Making Connections."

It was obvious, incidentally, that an interdisciplinary case-study approach could not depend on existing textbooks; rather, the approach puts primary emphasis on the use of primary sources, as well as a consideration of secondary critical materials. The value of assembling and presenting students with primary sources is that the course retains the flavor of original investigation and the heuristic possibility, rather than confronting the student with textbook generalizations and textbook solutions. Indeed, there is a hidden 'elitism' in the assumption that unmediated primary sources are inaccessible and unintelligible to the student. But our experience with the

Artifacts program has confirmed our faith that, given a certain maturity of attitude and a learning environment which fosters a friendly spirit of shared exploration, and which emphasizes direct experience of the work, the student is well able to share in the teachers' own enthusiasm and sense of discovery and willingness to learn from one another. Such a learning environment can transcend the question of relevance, for the student finds that to strike out into unfamiliar worlds of cultural experience is not to lose or belittle his or her own world of experience, but rather to enlarge and enhance it. Our approach is premised on the assumption that by providing as much of the cultural context as possible for each study, the student will be better placed to regard and experience the cultural 'legacy' not as a golden lavatory key or cultural passport to privilege, but as a multitudinous heritage to build upon, or to struggle with, or even against, but which in any case is recognized as rightfully his or her own.

Based on these principles, we have, since 1979, introduced and offered over sixty different course modules in the Artifacts of Culture program, and the offerings have grown from a single series of three one-credit modules per semester to the current offering of three such sequences each semester, totalling nine credit hours, each module of which is staffed by two and sometimes three instructors, each of whom receives full credit for each module participated in. (The instructors are fully and equally involved throughout a given course at every phase, from syllabus design and course material selection, to full classroom participation in every class period; as anyone who has experienced this teaching situation knows and can testify, it is much more work than teaching a course alone, not only because of the requisite consultation, negotiation and adaptation and accommodation, but especially in the endeavor to accommodate one's own thinking and professional training, one's own assumptions and premises, even one's fundamental perceptions to the epistemologies and methodologies of other disciplines.) This _is_ expensive, a "high-cost instructional method," as Walzer calls it in an article strongly defending traditional departmentalization (18), but that is, of course, a highly relative judgment: pesticide-free lettuce grown and picked by unionprotected agricultural workers is a "high-cost" product compared to contaminated lettuce picked by exploited migrant workers. But what are we to conclude from that? In any case, enrollment has helped to justify the expense of a team-taught program: each module currently has an enrollment of about sixty students. Topics have ranged from T'ang Dynasty China, the Psalms, _Beowulf_ and Sutton Hoo, Chartres Cathedral, and Faust to Jefferson's Monticello, _Don Giovanni_, Wagner's _Parsifal_, the Bauhaus, Olmsted's Park Designs, and Picasso's _"Guernica,"_ and the WPA Art Projects (see Table 1, at end: "Humanities Course Descriptions," Essex Community College Catalog, 1986-88).

Now, as regards the selection of topics, many of our colleagues at the college were initially skeptical (as have been colleagues from other schools when our program was presented at conferences) as to whether we could successfully run elective courses in such 'esoteric' subjects as Beowulf and Sutton Hoo, or Wagner's _Parsifal_, the latter including a field trip to attend the five-hour German opera. And yet, the intensive case-study approach actually requires no and need assume no particular prior knowledge or familiarity on the part of the student; as our music professor, Saul Lilienstein, has put it: We will assume that whatever topic we teach will, in effect, be for our students a world premiere. And, while we have leaned, at first, because of our own backgrounds and competencies, toward the presentation of topics drawn from the European and American traditions, the method is clearly adaptable and suited to any topic that lends itself to interdisciplinary study, and, with the impetus of a grant to strengthen international studies at our college, we have made a conscious effort to move the Artifacts program into new areas, such as Asian studies. Thus, it is actually one of the benefits of our case-study approach, with its flexible, modular structure, that it provides a more realistic, a more do-able way into new areas of study than does the Anthology/survey approach.

But here I also have a confession to make. While the Artifacts program was not designed with any particular student 'clientele' in mind, it has turned out to be essentially a vehicle for life-long learning and cultural enrichment for an auditing, adult, and largely senior citizen, student population. That is, while the courses are part of the college's regular credit-based offerings (and not part of what at our school is the administratively distinct Continuing Education program,a program of community outreach), and can be taken to satisfy aspects of the general distribution graduation requirements and are transferable, there are, frankly, easier or at least less problematical ways for students to satisfy those requirements than a course that avowedly involves an ongoing process of inquiry. So what has happened, unplanned and unforeseen at the time of our initiation of the program, is that this educational model has demonstrated a powerful appeal to the adult learner, and once that connection was made, once the Artifacts program and the adult learner were brought together, it has proven to be, as they say, a very 'meaningful relationship,' and our enrollment has grown to lecture-hall capacity semester after semester, so that we have, as noted earlier, increased the number of our offerings and moved to new off-campus locations, including the Baltimore Museum of Art, to accommodate this increased student interest. (For the fact is, incidentally, that the perceived "plight" of the humanities from the educationists' point of view may not apply to the culture at large: for the humanities have been flourishing as never before, but in such contexts as regional theater and art museum programming, and educational -nstitutions have been slow to inquire into and learn why a certain shift has occurred in the centering of the humanities from the campus to the museum.) And because our adult students are interested in taking our courses on the basis of a life-long learning commitment to cultural enrichment, we have been faced with what our division chairman and 'godfather' of the project, W. P. Ellis, has called the Sheherezade-syndrome: we are in the position of continually developing and offering new modules each semester, rather than, as we originally thought, developing a limited number of topics and essentially repeating them, in the usual curricular model. This, in turn, has proven to make of the Artifacts program a dramatically effective vehicle for professional development.

What this kind of interdisciplinary endeavor has done for me is to remind me of what I know and, more important, bring home to me what I don't know -- and hadn't even realized I didn't know. Teaching Othello, with a colleague from the music department, in relation to Verdi Otello was full of revelations for me, not only about the opera, but about Shakespeare's play. And teaching a course on Olmsted's Central Park with an American studies colleague opened my eyes to what was and remains an incisive question: why is Central Park, or, say, Brooklyn Bridge, not in the standard curriculum? Here is where I think the discipline-based departmentalization of higher education has utterly failed us: there just has been no place in it for such crucial cultural artifacts as Central Park or Brooklyn Bridge, and for no good reason at all. It's the unbearable lightness of the curriculum again. Whereas interdisciplinarity is a continuation of the life of the mind and the experience of intellectual vitality which drew us to this profession in the first place. It involves the continual necessity to re-assess one's own disciplinary background and perspective, to sort out what you know and don't know, the necessity to come to terms with those other lenses of the other disciplines, and the necessity above all to be vulnerable before colleagues and students alike -- to be teacher and student at once -- and to cultivate that questioning, tentative habit of mind that Arnold characterized as curiosity and disinterestedness, yet without renouncing passionate involvement or concern, which impel us, as Annie Dillard says, to "keep an eye on things."

Table 1- 1

HUM 201, 202, 203, 204, 205, 206 The Artifacts of Culture (1,1,1,1,1,1) CH

Offered as individual one-credit modules.

The Artifacts of Culture is a series of team-taught, interdisciplinary courses in the humanities. The series is composed of individual one-credit modules, each of which is devoted to the study of a single masterpiece or theme of world art, music or literature, studied from the viewpoints of a variety of disciplines. The courses may be used toward the satisfaction of the general distribution requirements in humanities for the A.A. degree and are transferable as humanities electives. The courses are of special interest to those returning to college primarily for purposes of personal enrichment. Students may register for any individual module for credit or for audit, and may take up to nine different modules for credit toward graduation. (Thereafter, additional credits may be accumulated but will not be applicable toward graduation).

Each semester, different series of modules will be offered; please consult each semester's schedule of course offerings for dates, times and locations.

FALL 1986

At the Mid-County College Center (Towson United Methodist Church):

Marriage of Figaro

A study of how Beaumarchais' satirical play, with its biting political and social commentary, was transformed into the foremost comic opera of the 18th century: Mozart's immortal "Marriage of Figaro."

Belle Epoque

A study of the exhuberant life of Paris at the turn of the century: the street life, the cafés, the theatres, galleries, concert halls and opera house.

At the Baltimore Museum of Art; three modules on Chinese culture:

T'ang Dynasty

A study of the social conditions, religious thought, visual and literary arts of the T'ang dynasty (618-906), with an introduction to the pertinent Chinese vocabulary.

Ch'ing Dynasty

A study of the social conditions, religious thought, visual and literary arts of the Ch'ing dynasty (1614-1912), emphasizing Chinese contact with the West, and including an introduction to the pertinent Chinese vocabulary.

Shih Ching

An introduction to Chinese poetry and poetics through a reading and study of the classic Book of Odes. Selected poems will be read in Chinese, along with various translations, including those of Ezra Pound.

Travel/study modules:

New York City: a Practicum in Art Criticism

Two sections will be offered, one in October and one in December. This is an arts-oriented weekend in N.Y.C., featuring a number of performances, museum visits and walking tours.

Listed below is a sampling of Artifacts courses that have been offered in the past. According to the new course numbering system; courses such as these, along with newly developed modules, will continue to be offered each semester—please consult each semester's schedule.

201 Series: Ancient World and Third World Topics

HUM 201.01 The Classical Nude

A study of Aphrodite as represented in Greek and Roman myth, literature and art, along with later adaptations, with Praxitiles 'Cnidian Venus' as a starting focal point.

HUM 201.02 Teotihuacan

A study of the archaeology, art and social structure of Teotihuacan as an introduction to the study of the pre-Columbian civilizations of Mexico, with attention to the myth of Quetzalcoatl.

HUM 201.04 The Orpheus Myth

A study of the myth of Orpheus from its origins in ancient myth and religion through the adaptations of the story of Orpheus' quest for Euridice in the underworld in poetry, visual art and film, drama and opera, including works by Ovid, Virgil, Moteverdi, Gluck, Cocteau and Tennessee Williams.

HUM 201.07 The Oedipus Myth

A study of the myth of Oedipus and its transformations in drama, poetry and music, from Sophocles and Seneca through Freud, Cocteau, Stravinski and 'The Gospel at Colonus.'

HUM 201.10 The Psalms

A study of the poetry and religious feeling of the Hebrew Psalms, in their Biblical context, and as a source of inspiration for later poets, musicians and artists; comparative study of different translations, paraphrases and musical settings from the middle ages to the present.

202 Series: Medieval Topics

HUM 202.01 Beowulf and Sutton Hoo

A study of the roots of Anglo-Saxon culture, through a comparative analysis of the imagery and structure of Beowulf and an examination of the archaeological excavations of Sutton Hoo.

HUM 202.02 Chartres Cathedral

An examination of the glory of gothic art: the architecture, the sculpture and the stained glass made to honor the Queen of Heaven. Focus on the iconographic programme of the cathedral and its theological background.

HUM 202.04 Byzantium: Hagia Sophia

A study of the history and culture of the great center of the Eastern half of the Roman Empire founded by Constantine, with a focus on its central artistic glory, the cathedral of Hagia Sophia.

Table 1- 2

203 Series: Renaissance topics

HUM 203.01 Faust

A study of the Faust legend in drama and music, from the 16th century sources and Marlowe's 'Dr. Faustus' to Goethe's 'Faust' and operas by Gounod and Berlioz.

HUM 203.02 Commedia dell'arte

A study of the origins and traditions of improvisational comedy as practiced by the commedia troupes of Italy and their influence on subsequent European comedy.

HUM 203.04 Piazza San Marco

An exploration of the heart of Venice, the focal point of its government, its worship and its public festivities; special attention to the Venetian painters and the composers who worked at San Marco.

HUM 203.07 Falstaff

A study of Shakespeare's greatest comic creation, as presented in the Henry plays and 'Merry Wives of Windsor' and Verdi's opera 'Falstaff.'

HUM 203.08 Massachusettes Bay Colony

A study of the founding of the colony, its governing social and political structures, its architecture and artifacts, and the sacred and secular literature of the Puritans.

204 Series: Eighteenth Century Topics

HUM 204.01 James River

A study of the early settlements along the James River, their political and social organization and cultural life, with particular focus on the architecture and vernacular arts.

HUM 204.02 Jefferson's Monticello

A close look at the ideals of Jefferson as expressed in the highly personal style of his home, Monticello: its design, furnishings, landscaping and its relationship to other domestic architecture of the period.

HUM 204.03 Hogarth's London

An exploration of the London reflected in Hogarth's paintings and engravings, with an emphasis on the great narrative cycles and their adaptation by other artists and writers.

HUM 204.04 Don Giovanni

A close study of Mozart's opera, in relation to the sources and other treatments of the Don Juan legend, including plays by Tirso de Molina and Moliere, as well as subsequent treatments of the theme.

HUM 204.07 Washington: Image of a Leader

The character and image of George Washington, in his own time and as represented in subsequent American history, iconography, literature and legend.

HUM 204.08 Washington: Image of a Capital

The evolution of the nation's capital: the design of the city in relation to that of the colonial capitals; the milieu of Washington in the federal and civil war eras.

205 Series: Nineteenth Century Topics

HUM 205.02 Tristan and Isolde

A study of Wagner's opera in the context of the development of Wagner's own career, and in relation to the literary sources of the legend, particularly Gottfried von Strassbourg's Tristan.

HUM 205.03 Wagner's Ring

An introduction to Wagner's great opera cycle, with consideration of its medieval sources (Niebelungenlied, Volsungasaga) and the contemporary reception and ongoing critical discussion of the work.

HUM 205.04 Wagner's Parsifal

A study of Wagner's effort to forge a new art form, fusing music, poetry, drama, spectacle and ritual, in his opera Parsifal, with attention to the literary sources, particularly Chrétien and Wolfram.

HUM 205.06 Shubert: Music and Poetry

A study of Shubert's settings for songs, including lyrics by such poets as Shakespeare, Goethe and Heine, exploring the interrelationship of music and poetry.

HUM 205.07 1850 U.S.A.

A study of America's cultural high-noon: the midpoint of the 19th century, which saw the publication of classics by Emerson, Thoreau, Melville and Hawthorne, and the flowering of landscape painting and new modes of vernacular architecture.

HUM 205.08 The Crystal Palace

A study of the Great Exhibition of 1851 in London, housed in the Crystal Palace, as a reflection of the state of the practical and the fine arts in Europe at mid-century.

HUM 205.09 Olmsted: Park Design

A study of the innovative work in landscape and park design by Frederick Law Olmsted, in the context of the history of ideas and practice about park design, and in the context of the social conditions of mid-19th century America.

HUM 205.11 Franz Joseph's Vienna

An exploration of the architecture, the art and music of imperial Vienna at the time of Franz Joseph; focus on the Ringstrasse projects and the origins of the Secession Movement.

206 Series: Twentieth Century Topics

HUM 206.01 Frank Lloyd Wright

A study of America's great native American architectural genius; the prairie school of American architecture; the marriage between human artifice and the organic forms of nature; new definitions of space for home and workplace.

HUM 206.02 The Modernist Vision

An exploration of the modernist vision through a comparative study of three masterpieces: Picasso's "Les Demoiselles D'Avignon," Stravinski's "Rite of Spring" and Eliot's "The Waste Land."

Table 1- 3

HUM 206.03 Les Ballets Russes
A study of the origins and early history of the great company brought together by Sergi Diaghilev and which united the talents of choreographers, dancers, painters, designers and costumers and forged a new foundation for the world of dance.

HUM 206.04 Picasso's Guernica
A study of Picasso's monumental canvas: its place in the development of his art, the evolution of the project itself, and its place in the symbolism surrounding the Spanish Civil War.

HUM 206.05 Bauhaus
A study of the 'Building Institute' founded by Gropius in Germany after the first world war and which became the school that played a crucial role in the promulgation of the International Style in architecture.

HUM 206.06 WPA Art
A study of the various federally sponsored projects in support of the arts under the Roosevelt administration.

HUM 206.10 Brooklyn Bridge
A study of the Great Bridge as a landmark of engineering and design, and the ways in which it has served as a powerful focal image and metaphor for poets and painters.

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LOCK HAVEN UNIVERSITY'S PROPOSED BACHELOR OF SCIENCE DEGREE IN MANAGEMENT OF TECHNOLOGY; MEETING THE NEEDS OF TRANSFER STUDENTS WITH TECHNICAL/PROFESSIONAL ASSOCIATE DEGREES

by Robert E. Seyfarth

Background

Informal discussions in 1983-1984 between the presidents of Lock Haven University and Williamsport Area Community College led both to believe that their institutions ought to explore the feasibility of establishing cooperative educational relationships. While several factors influenced their thinking, the planned construction of the Advanced Technology and Health Sciences Center at the Community College, the strength of the liberal arts education at Lock Haven University, and the relative proximity of the two institutions were the most dominant.

In January 1985, Lock Haven University conducted an interest survey of Williamsport Area Community College graduates to determine the market potential for offering Lock Haven University programs on the Williamsport Area Community College campus. The results of the survey indicated strong interest with the majority expressing a desire for business related degree programs.

In September 1985, a planning committee was appointed at Lock Haven University to investigate possible articulations with community colleges and Williamsport Area Community College in particular. The result was a general model that would serve as a basis for articulating technical/professional two-year degrees (Associate of Applied Science) into baccalaureate degree programs. Based on that general model, the Bachelor Degree in Management of Technology was developed. It has been submitted to the State System of Higher Education for review and approval.

Need.

Many individuals holding two-year technical/professional degrees are discovering they lack a liberal education that enables them to understand and appreciate the diversity of our complex culture. Since their two-year programs are narrow in focus, they are sensitive to the limitations of being overly specialized. Additionally, many realize that their professional opportunities are limited because of lacking a baccalaureate degree.

Consequently, the Management of Technology degree seeks to

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offer a broad-based program a cornerstone of which is a strong liberal education. Additionally, skills in management are provided to allow graduates to progress into upper management levels where more generalized skills are required. Thus graduates will have strong technology-based skills provided by the two-year degree and in-depth management skills provided by the Management of Technology, both undergirded by a strong liberal education.

The interest survey conducted in 1985 indicated a strong interest express in management studies by graduates from a broad representation of two-year technical programs. When reviewing how closely these programs would articulate with the existing management degree at Lock Haven University, it was realized that many potential students would be discouraged from pursuing such a program because so little of their two-year programs would apply to meeting major requirements. The alternatives were then: (1) promote a general studies degree; (2) develop a program which would address specifically the expressed interest in management programs and recognize credit transfer barriers; or, (3) do nothing. Once it was decided that the second alternative would be preferable, the Management of Technology degree was designed.

Program Design

Students who have earned Associate of Applied Science (AAS) degrees or an equivalent in approved technical/professional programs may matriculate into the Management Science major and transfer approximately 60 semester hours credit toward the degree. The curriculum structure is summarized as follows:

	Credit Hours
General Education (from AAS & BS programs)	60
Lower Division Technical/Professional Studies (AAS)	30
Management of Technology Core	*30
Upper Division Management Studies	30

General Education Requirements. Students are required to complete a 60 semester hour general education requirement through a combination of courses taken at the community college and Lock Haven University.

Lower Division Technical/Professional Studies. Students will normally matriculate into the BS in Management of Technology with the equivalent of 30 semester hours credit or more in technical/professional courses. A maximum 30 semester hours credit will be accepted as a block of courses into the four-year degree program. This block represents a coherent group of courses having a valid educational content of which in most instances there is not an equivalent at Lock Haven University (example: laser electro-optics technology).

Management of Technology Core. Students are required to complete a body of courses some of which provide the basic competencies required for more advanced studies in the major. (Note: * Some of these basic competencies may have been fulfilled by courses taken in the two-year program.) The core is:

	Credit Hours
Economics: an introductory course in economics	3
Communications Skills: a course in business writing, technical writing, or equivalent	3
Quantitative-Analytical Skills: an introductory statistics course	3
Computer Literacy: a computer literacy particularly with business applications using microcomputers	3
Accounting: a two semester sequence in accounting principles or equivalent	6
Interpersonal Skills: a course in interpersonal skills, interpersonal communications or equivalent	3
Marketing: an introductory course in marketing	3
Management: an upper division course in management concepts	3
Senior Capstone Management Seminar	3
Total	30

The Senior Capstone Management Seminar is to be taken as one of the last courses in residence. It is an educational experience in which specialized skills acquired in individual courses are integrated through investigation and discussion of broader issues in management, the impact of technology and implications for society.

Upper Division Management Studies. Courses meeting this requirement will be selected by students in consultation with their academic advisors and approved by the Dean of the College. The objective is to design a coherent program that enhances and builds upon areas reflected in the students' concentrations in the two-year degrees. An example of such a program might be:

	Credit Hours
Business in American Life	3
Operations/Production Management	3
Financial Management	3
Personnel Management	3
Strategic Management of Technology	3
International Business	3
Industrial Sociology	3
Labor-Management Relations	3
Organizational Theory and Practice	3
Business and Professional Speaking	3
Total	30

An overall summary of the requirements for the B.S. in

Management of Technology is illiustrated in Appendix A.

Appropriateness to Mission

The Lock Haven University Mission Statement articulates a philosophy that a strong liberal arts education is a vital concomitant in preparing individuals for effective living in their culture. Through a broad general education encompassing the arts, religion, politics and technology, students can appreciate the past and be better prepared to cope with future challenges to culture and technology.

The proposed Bachelor of Science in Management of Technology responds to objectives contained in the University's mission ststaement as well as responding to a number of strategic directions outlined by the Board of Governors of the State System of Higher Education. Among these responses are:

1. The Management of Technology degree makes accessible to holders of two-year technical/professional degrees a realistic opportunity to pursue a four-year degree both on a full-time and a part-time basis. Hence, a new population of community college graduates who heretofore had considered their two-year degrees to be terminal, can be served.

2. By integrating a strong liberal studies component, upper division professional studies and lower division technical/professional studies, students are better prepared to pursue an expanded set of career options.

3. The degree charts new directions in the articulation of two-year technical/professional degrees into four-year degree programs. It seeks to build upon the skills developed in advanced technology, applied science, and professional programs by providing skills in management and enhanced by a strong liberal education component. The degree recognizes that many two-year programs have valid educational content and integrity. Therefore, the intent is to build upon the two-year degree by providing a mechanism by which those programs can be evaluated and articulated into a four-year degree program.

4. The opportunity to achieve economies by sharing resources with cooperating community colleges is another consideration. Lock Haven University has opened a center on the Williamsport Area Community College campus. A significant population will be pursuing the Management of Technology major at that center. Accordingly, economies can be achieved by sharing the physical plant and libraries. Faculty resources will also be shared since the Williamsport Area Community College faculty will make a substantial contribution to providing the

general education requirements and lower division Management of Technology Core requirements.

5. The nature of the cooperative alliance between Lock Haven University and the cooperating community college is strengthened by the Management of Technology.

Academic Integrity.

Lock Haven University has maintained a commitment to offering a strong liberal education to all of its graduates. The proposed Management of Technology degree recognizes the importance of the liberal arts in providing an understanding and appreciation of culture and its impact on business, society and technology. Therefore, the major seeks to integrate liberal education with professional and technical studies.

There has been much discussion and debate as to whether the Management of Technology major violates the traditional concept and structure of the baccalaureate. At the core of the dilemma has been the willingness to recognize the changing demographics of the population and how their priorities will ultimately affect the educational establishment. To many, the acceptance of technical course credits violates academic integrity. However, the Management of Technology program recognizes that many two-year programs are on the leading edge of technology. The skills at the technical and cognitive levels are far above what have been historically considered vocational/technical. What Lock Haven University has proposed is to maintain the integrity of its general education program and provide an in-depth management knowledge base to students already having a strong technical background.

The issue of accepting credits earned toward the A.A.S. is not taken lightly. By definition of the American Association of Community and Junior Colleges and by general agreement of most four-year and two-year institutions, the A.A.S. is not intended to be the equivalent of the first two years of a baccalaureate program. Traditionally, four-year institutions, when evaluating courses to be accepted in transfer, compare courses individually with courses on the roles of the four-year institution. If there isn't a comparable course, either the course is not accepted in transfer or at best awarded general education elective credit. As a result, graduates of A.A.S. programs are discouraged from pursuing four-year degrees.

An intensive review of A.A.S. programs at Williamsport Area Community College revealed that many appeared to have the academic content and skill development consistent with university parallel courses. New programs in the advanced technologies also extend the traditional bounds normally associated with associate programs. A number of the high technology programs require 70-78 semester credits rather than the traditional 60-64 credit requirement. Accordingly, the course work may well be more advanced than traditionally attributed to two-year programs. This premise has been supported by comparing the two-year programs with analogous programs at four-year institutions. Many courses offered in the Williamsport programs are considered "upper division" courses at the four-year institutions.

The innovative feature of the Management of Technology degree is the acceptance of a block of courses taken in the A.A.S program towards the fulfillment of the major in the four-year program. Lock Haven University is not an institution with a strong technical base. Therefore, any model to articulate the A.A.S. programs into four-year programs has to be designed in such a manner to optimize the transferability of credits earned in the two-year programs to requirements in the four-year program. If not, students would be discouraged from pursuing the four-year degree. As a result, the concept of including a 30 semester credit block of technical courses from the two-year degree has been developed. This block of technical courses has a coherence and academic integrity for which there is not a comparable curriculum at Lock Haven University. The block provides the technical base upon which a management curriculum can be superimposed.

An investigation of several colleges and universities having baccalaureate programs that are articulated with A.A.S. programs. supports the premise that the A.A.S. degree is receiving more consideration and credibility. While none of these institutions use the same general model as Lock Haven University, the very concept of articulating A.A.S. programs with four-year degrees gives credence to the academic content of the two-year programs.

The criteria for determining which two-year programs and which courses in those programs are accepted for baccalaureate transfer credit into the Managment of Technology program involve a review at multiple levels. Academic administrators and faculty from both institutions are integral to the review process.

First, the two-year program under consideration must have academic integrity. It must demonstrate that it has sufficient academic content and rigor to differentiate it from more vocationally oriented A.A.S. programs. For example, Secretarial Office Administration, Word Processing or Automotive Technology are primarily vocational in content and would not be considered.

Second, the two-year program must have a significant technical/professional or applied science component. In most cases, these programs have a component for which there is not a comparable program at Lock Haven University to which it would naturally articulate. For example, Business Management or Accounting would not be eligible since those programs are well articulated with Lock Haven's four-year business program.

Third, representatives from both institutions review the two-year program to determine which individual courses would not appropriately transfer into the four-year program. This may be due to a lack of academic content or appropriate level of rigor.

Fourth, courses that compose the Lower Division Technical/ Professional Studies block of the Management of Technology program are specified. Other courses outside the specified block are evaluated and applied to general education requirements, the Management of Technology Core, or electives in the normally prescribed manner.

A listing of academic programs at Williamsport Area Community College considered to meet the criteria above is included in Appendix B.

Additional safeguards stipulated to enhance the academic integrity of the proposed program include:

1. Students must hold the two-year (A.A.S. or equivalent) before matriculating into the Management of Technology program. Hence, only those students who attained a measure of success in their academic programs will continue with the four-year degree.
2. Students must complete a 32 semester hour minimum residence requirement to earn a degree from Lock Haven University. Additionally, a minimum of 36 semester hours in upper division course work is required in the Management of Technology program.

At each stage of the development process, academic administrators and faculty from Lock Haven University and Williamsport Area Community College jointly reviewed the concept and implementation procedures. Not only has it enhanced the feasibility of the proposed program but has served to reinforce the cooperative alliance between the two institutions. It has spawned increased dialog between the faculty of the two institutions and has encouraged departments to investigate other opportunities. The Management of Technology program proposal has been submitted to the State System of Higher Education for formal review and approval.

APPENDIX A

LOCK HAVEN UNIVERSITY

BACHELOR OF SCIENCE
IN
MANAGEMENT OF TECHNOLOGY

REQUIREMENTS

MINIMUM TOTAL CREDITS REQUIRED FOR B.S. DEGREE			128 S.H.
GENERAL EDUCATION			60 S.H.
Health, Physical Education & Recreation		3 s.h.	
Humanities		18 s.h.	
Literature	3 s.h.		
Composition	3 s.h.		
Speech	3 s.h.		
Philosophy	3 s.h.		
Art/Music/Theater	6 s.h.		
History & Social Sciences		12 s.h.	
World History	3 s.h.		
Economics/Government	3 s.h.		
Psychology	3 s.h.		
Sociology/Anthropology	3 s.h.		
Natural Sciences & Mathematics		9 s.h.	
Natural Science (with lab)	6 s.h.		
Mathematics	3 s.h.		
General Education Electives		18 s.h.	
LOWER DIVISION TECHNICAL/PROFESSIONAL STUDIES (A.A.S.)			30 s.h.
MANAGEMENT OF TECHNOLOGY CORE			30 s.h.
Economics	3 s.h.		
Business/Technical Writing	3 s.h.		
Statistics	3 s.h.		
Computer Literacy	3 s.h.		
Accounting	6 s.h.		
Interpersonal Skills	3 s.h.		
Marketing	3 s.h.		
Management: Concepts and Strategies	3 s.h.		
Senior Capstone Management Seminar	3 s.h.		
UPPER DIVISION MANAGEMENT STUDIES			30 S.H.

APPENDIX B

LOCK HAVEN UNIVERSITY

BACHELOR OF SCIENCE
IN
MANAGEMENT OF TECHNOLOGY

Program Articulation
with
Williamsport Area Community College

The following Associate of Applied Science degree programs are considered for articulation with the B.S. in Management of Technology:

Industrial Technology
- Automated Manufacturing
- Civil Engineering Technology
- Electronics Technology
  - Automation Instrumentation
  - Biomedical Electronics
  - Computer Automation Maintenance
  - Electronics Engineering
  - Fiber Optic/Communication
  - Laser Electro-Optics
- Engineering Drafting Technology
- Plastics and Polymer Technology
- Tool Design Technology
- Toolmaking Technology

Construction Technology
- Architectural Technology
- Electrical Technology

Business and Computer Technologies
- Computer Information Systems

Integrated Studies
- Technology Studies

Natural Resources Management
- Forest Technology
  - Forestry Emphasis

THE AIRWAY SCIENCE PROGRAM AS A NON-TRADITIONAL/INTERDISCIPLINARY PROGRAM

J. Anthony Sharp

Introduction

In 1981, President Ronald Reagan fired some 11,000 striking air traffic controllers for what was termed an illegal strike against the government of the United States. The strike was called by the Professional Air Traffic Controllers Organization (PATCO), the official union and voice of the nation's air traffic controllers, to bring pressure on the government to favorably deal with their demands regarding working hours, salaries, retirement, and working conditions. (Bilstein, p.286) President Reagan justified his actions by making reference to a federal statute of the United States Code which prohibits government employees from striking against the government. (U.S. Code)

The air transportation and the air traffic control systems in this country had received a crushing blow. In addition to increasing the already high unemployment figures, the air traffic control system was placed under tremendous strain. Even after utilizing supervisory personnel, it was several days before the system could be brought back up to a minimally acceptable level. As it were, the system was not brought back to normal operational levels until 1982/83. (Bilstein, p.286)

The most recent and by far the most notable occurrence to affect the airline industry, however, was the Airline Deregulation Act of 1978. More commonly referred to in federal legislative circles as Public Law 95-504, it not only would remove the industry's major regulatory body, the Civil Aeronautical Board (CAB), but it also would gradually eliminate specific federal controls. The effect of this new law could be seen most readily in the number of new air carriers as market forces of a deregulated industry began to take hold. The new carriers entered the market as low-cost carriers and generally were able to provide low cost service. The new freedom of market entry and exit and the proliferation of new carriers placed increasing demands upon the National Airspace System. The aviation industry was still adjusting to the effects of deregulation when the air traffic controllers went on strike. To be exact, the interval was just less than two years and nine months.

The PATCO strike was yet another major occurrence that set into motion a series of actions which would eventually transform the once predictable aviation industry. In short, the air traffic system would have to be revamped. To make it most effective following restoration, the system would have to be reconceptualized and carefully planned. In addition to bringing staffing levels back to normal, the Federal Aviation Administration (FAA) and the aviation industry still had in place its various pre-strike plans and was ready to implement them. (ATA, 1977) Most of these plans related to employing new technologies and to planning for the growth of the industry which was expected to occur in the wake of the Airline Deregulation Act of 1978. (Kane and Vose, p.14-1 - 14-5).

The education system in America is no stranger to accepting and handling difficult tasks and the college and university segment, presenting a significant portion of that system, is not without exception. The history of education and, indeed, higher education in America is complete with occurrences in which it has been called upon to assist with matters of national concern. (Church) The need to revitalize the nation's air transportation system and to restructure the nation's air traffic control system was no small matter. And while the FAA had hastily developed plans to deal with the immediate and short term needs of the system following the strike, the FAA turned to the nation's colleges and universities for assistance, in part, with the longer term solution.

To assist with this grand effort, the FAA went to an element within the nation's college and university system. From this cooperative, a major educational development was achieved. For the first time in aviation history, the field of aviation education would have within its inventory, a generally recognized postsecondary aviation education program. This postsecondary aviation program is called Airway Science, a program which traces its concepts and roots deep within non-traditional education.

Program Concepts

The Federal Aviation Administration (FAA) is an administrative arm of the United States Department of Transportation. The FAA dates its origin to 1926 when the Congress approved and President Calvin Coolidge signed into law the Air Commerce Act. This act established within the Department of Commerce the Aeronautics Branch. Among other things, this act gave the Aeronautics Branch the authority to certificate pilots and aircraft; to establish, operate, and maintain air navigation aids; advance research to improve and develop those aids; and to promote flying safety. (Briddon, p.9) For the first time, the federal government through the administration of the Aeronautics Branch was placed squarely in the business of aviation by taking authority over a number of functions which previously had not been regulated.

Since 1926, the FAA has undergone several name changes and agency reassignments until in 1967, the then named Federal Aviation Agency became the Federal Aviation Administration and an administrative body of the newly formed Department of Transportation. Through the years, the basic responsibilities of the FAA have not changed. Even today, the FAA continues to concern itself with the promotion, growth, and regulation of civil aviation and the operation of the National Airspace System. (Clay, p.53-56). These important areas of FAA responsibility are also of national interest and concern. Collectively, these responsibilities require the talents, skills, education, and knowledge of thousands of committed FAA employees and others who work in and support the industry's infrastructure.

Mr. J. Lynn Helms was the Administrator of the FAA during the time of the 1981 air traffic controllers strike and Mr. Drew Lewis was the Secretary of the Department of Transportation. Shortly after the start of the strike, Mr. Drew made comments to the press that the colleges and universities would be consorted in an attempt to restructure the nation's air traffic system. While Mr. Helms had had pre-strike plans for developing an "educational concept" which came to be referred to as Airway Science, the strike itself and Mr. Drew's comments to the press actually hastened the development of his concept. (Odegard, p.34) Mr. Helms had recognized the need for college-level aviation curricula which would not only alleviate agency understaffing but would educate students for future needs of the FAA and the aviation industry. In addition, he recognized the increasing complexity of technical and managerial skills that would be required to meet the technological advances being planned for the aviation industry. (FAA Guidelines, 1983)

Besides the more obvious benefits, Mr. Helms had other underlying reasons for his interest in development of the Airway Science curriculum. For one thing, statistical evidence at the time of the strike showed that fewer than 15% of the nation's air traffic controllers had bachelors degrees. It was an interesting observation by Mr. Helms that this lack of college education may have latently contributed to the strike. The general feeling was that the inability of the striking controllers to see and more favorably comprehend the broader scope of problems facing the FAA was directly related to their lack of college educations. Had the percentage of striking controllers been college educated, Mr. Helms concluded that there would have been a greater likelihood of affecting the FAA's position and a better probability of averting the strike. It seemed to him that the air traffic control system needed a work force which was more broad-minded and more educated. (Odegard, p.34)

The FAA administrator knew also that aviation courses and programs which were taught on the postsecondary level suffered from an image problem. While aviation education has a long history, as a field of specialized study it has not been defined very well. When compared among one another, aviation courses and programs were found to be very different in concept and design. Naturally, these differences were evident in the content of the course or program, the quality of the curricula, and the caliber of graduates produced. Another problem was that aviation programs were often perceived as non-traditional technical and vocational programs. Prior to the advent of the Airway Science program, there was no generally recognized and accepted aviation education course or program on the postsecondary education level. (Jones, p.11-12) Mr. Helms was insistent in his demand that Airway Science programs have attributes of both non-traditional and traditional education. (Odegard, p.35) It was important to him that the program be developed non-traditionally so that FAA employees could upgrade their education in order to enhance and develop new skills and talents related to their employment. This would be important as the National Airspace System was upgraded and became more modernized. Morever, Airway Science would need to be traditional in its approach in order to foster its acceptability on the college campus as a rigorous and creditable academic program. This dimension of the program would be important in attracting quality students who would be educated for the present and future needs of the aviation industry.

An interesting consideration was raised during the early phases of Airway Science program development. It was important that a sensible difference be made between "training" and "education". As related to the aviation industry, this was a particularly poignant distinction since the overwhelming majority of the work force is trained, and not educated, to perform their jobs. For as long as people have had interests in flying and aviation, they have attempted to pass on their knowledge through various methods of training and/or education--sometimes in formal ways but mostly informally, and sometimes in traditional ways but most often non-traditionally.

During this early phase of Airway Science program concept development, training and education were perceived and defined as two separate processes. Training, on the one hand, was "simply learning how to do something--how to become prepared for a particular test of skill--and it leaves little room for initiative or spontaneity by the student...Education, on the other hand, prepares people to deal with problems that are complex and unpredictable, or for which no best answer exists." (Odegard, p.34) Further, "education" was regarded as the most relevant process for use in new or unanticipated situations--situations which arise often in the present airspace system and situations which are likely to arise in the airspace system of the future.

Thoughtfulness to the interdisciplinary nature of the Airway Science program were weighed and ample consideration was given to its importance.

> "Educated decision-making requires accurate perception, considering the alternatives, and looking ahead to the consequences of those alternatives. To engage in this kind of thinking a person must have broad knowledge and understanding in many social, technical and economic areas, and must be free of rigid thinking." (Odegard, p.34)

Of all the aviation education courses and programs which were currently taught on the postsecondary education level, it was felt that Airway Science had the best chance of achieving the goal of producing "educated decision-makers."

Expressions of the importance of the interdisciplinary quality of the Airway Science program can be seen in a 1986 article for a FAA publication by Mr. Donald D. Engen, the successor to Mr. Helms as the Administrator of the FAA. In his brief article, Mr. Engen wrote that the FAA was looking for people who were technically competent, who had the ability to think and innovate, who communicated well, and who were in tuned with and appreciated human values. "Airway Science is a rigorous program to educate the future managers of the aviation industry. The curriculum stresses hard science, the human side of management, knowledge of computers and, of course, aviation." (Engen, p.2-3)

The theme "humanity" reoccurs often in the early efforts to establish the Airway Science program. It was recognized that the airspace system of the future world require the utilization of state of the art technology. But, just as important, the system would require people who are broad-minded and disciplined thinkers and people who are genuinely interested in people. This requirement would be met by intertwining humanity and management requirements with other core courses, thus producing a generic Airway Science curriculum which would ensure the interdisciplinary character of the program.

Program Development

To execute his Airway Science program concepts, Mr. Helms went to the University Aviation Association (UAA) which represents collegiate aviation education interests. The UAA was founded in 1950 and is the only professional organization which represents the non-engineering element in collegiate aviation education. (Schukert, p.iv) In addition, the UAA promotes and develops the interaction between the academic community and the aviation industry.

Mr. Helms approached the president of the University Aviation Association, Professor Robert Ryder of Delta State University, with his initiative and he asked of him that an UAA Airway Science Task Force be formed. The task force was charged with the responsibility of designing a generic core curriculum for the Airway Science program and generic curricula for each of the five designated concentrations within the Airway Science Program. In 1982, the FAA recommended the Airway Science curriculum and acknowledged the enormous effort put forth by the UAA Airway Science Task Force. Five areas of concentrations were detailed which included Airway Science Management, Airway Computer Science, Aircraft Systems Management, Airway Electronic Systems, and Aviation Maintenance Management.

The UAA and FAA were concerned with and gave much consideration to the academic integrity, workability, and viability of the Airway Science program as a whole and to each individual college which had expressed an interest in an Airway Science program. To counter anticipated concerns, the program was designed upon several important principles. First, each individual college Airway Science program would have to meet its own normal academic and accreditation requirements. Second, it would have to meet the accreditation guidelines of the UAA. Third, the Airway Science curriculum would be designed to allow each college or university the option to offer any or all of the five designated areas of concentrations. And fourth, the curriculum would be tailored to appeal to students interested in careers in both the public sector of aviation (e.g. the FAA, state aviation departments, military services, etc.) and the private sector (e.g. major air carriers, commuter airlines, fixed base operations, etc.).

Each college and university offering the Airway Science program would be given latitude in the specific design of their individual programs. Thus, no two Airway Science programs were likely to be the same. However, the UAA and FAA were very specific in requiring that each program include six (6) major subject areas. The six subject areas and some pertinent information describing each of them are as follows:

1. General Studies (27 semester hours). To include written and oral communication, social and behavioral sciences, humanities and the arts.
   Purpose: To provide the opportunity for the extension of basic learning and communication skills, development of intellectual curiosity, and assessment of a social and historical perspective necessary for a broadly based, "well rounded" individual.

2. Mathematics (25 semester hours including Math, Science, and Technology courses combined). To include basic math courses to serve as foundations for computer science, science courses, and specific Airway Science areas of concentration.
   Purpose: To offer a mathematical background specifically directed toward managerial personnel functioning in a high technology environment, including the preparation necessary for an area of concentration in Airway Computer Science and in Airway Electronic Systems.

3. Science and Technology (25 semester hours including Math, Science, and Technology courses combined). To include physics, geography, chemistry and appropriate technology and/or engineering courses.
   Purpose: To expose the student to those scientific disciplines which foster and develop logical and in-depth thought processes particularly pertinent for managers in a rapidly developing and electronically evolving work environment.

4. Computer Science (9 semester hours). To include basic applied computer science courses.
   Purpose: To provide the fundamental foundations required for a manager to understand, appreciate, and effectively work with high technology personnel in a complex and dynamic oriented industry.

5. Management (9 semester hours). To include general management courses.

    Purpose: To provide an educational background in management related areas expressly directed toward understanding and interacting with the human and interpersonal relationships necessarily developed in such a diverse field as aviation.

6. Aviation (15 semester hours). To include aviation safety, aviation law, navigation, communication, flight meteorology, aviation history and flight operations.

    Purpose: To provide the student with a broad knowledge of aviation operations, the aviation industry, the problems of flight, and the need to integrate these facets into a comprehensive understanding of the aviation community as a whole.

As it stands currently, institutions which offer the Airway Science Program have no special admission requirements for perspective Airway Science majors aside from their regular college or university admission requirements. Once the student is accepted at a college or university offering the program and then chooses Airway Science as the field of study, the student should then select one of five areas of concentration within the Airway Science program. This early selection of an Airway Science concentration is important because each area of concentration has an associated course sequence. By closely following the course sequence through each of the four years of study, the student is less likely to attempt extraneous and unrequired courses and is more likely to complete the selected concentration within a four year period.

The five areas of concentration and a brief description of each are as follows.

1. **Airway Science Management** - Coursework in this area of concentration will prepare students specifically for a variety of administrative and management positions in the aviation community. It will be oriented to the technology of aviation through the basic requirements of the airway science management curriculum. Numerous career options exist both in the private industry and the government in administrative and management areas related to aviation activities.

2. **Airway Computer Science** - This program of study will consist of a series of computer science courses which will prepare the individual to function in diverse areas of computer operation, design, maintenance, troubleshooting, and programming within the field of aviation. It is expected that Airway Science graduates with the computer science concentration will be capable of assuming management and supervisory positions in time.

3. **Aircraft Systems Management** - This area of concentration focuses on aircraft flight operations and has as its major goal the preparation of persons with qualifications as professional pilots with a science and technology orientation. Graduates in this option can expect to enter career fields with the government as Aviation Safety Officers or Operations Pilots or in the private segment of the industry as professional pilots, certified flight instructors, and flight operations managers.

4. **Airway Electronic Systems** - This area of concentration includes a comprehensive study of the theories of electronics as well as practical experiences which would prepare the graduate to assume duties for a career in government and private aviation electonics. These graduates will be qualified to work not only in maintenance and troubleshooting, but also in supervision, management, testing, and developmental work.

5. **Aviation Maintenance Management** - This area of concentration includes an indepth study of the theoretical and practical aspects of airframe and powerplant maintenance. In addition to possessing the Bachelor of Science degree, the graduates from this concentration will hold a mechanics certificate with the Airframe and Powerplant (A&P) rating. They will be qualified to work not only in maintenance and troubleshooting, but also in supervision and management.

Conclusion

Aviation has grown enormously since that first and very modest flight by Orville Wright in 1903. History has recorded that that first flight lasted just 12 seconds and covered a distance of only 120 feet. Of course, we recognize that accomplishment as a historic event and a remarkable feat for its day. Yet no one during that time could even imagine the significance of such an event or the magnitude of its impact upon our modern way of life.

Aviation is approaching eighty-four years old. Yet, a fact that has remained constant through the years is that men and women continue to look toward aviation as a way of making their hopes and dreams a reality. Also, a fact that has remained true through those years is that the educational requirements for employment entry into the aviation industry have steadily increased. The men and women who fill the employment needs in today's industry are often highly trained, highly skilled, and highly educated. They work in modern sophisticated facilities with state of the art equipment. No longer are technically sophisticated airplanes built in bicycle shops with shade tree mechanics providing the maintenance. Gone are the old safety tactics of "hit or miss." Today's aviation industry demands that the margins for error be reduced to their absolute minimums and that the National Airspace System be made as safe as possible.

Future industry safety requirements will be even more stringent than they are currently as the industry strives to improve its safety performance over that of the past and as it continues to explore new frontiers. The men and women of tomorrow's aviation industry will not only be trained to do their jobs but they will be fully educated in their chosen aviation careers.

The Airway Science program is a college academic course of study designed to educate and prepare those persons who will be the future technical managers and administrators of our nation's aviation industry. High school students preparing for a college education in the field of Airway Science must prepare themselves as they would prepare themselves for the academic study of any other field of science. Naturally, a solid background in the sciences and mathematics are desirable but so are strong skills in the areas of the social sciences, business, and the humanities. Future aviation managers and administrators must be comfortable with a variety of tasks which might call upon any facet of their skills, knowledge, and education.

To that end and because aviation is and always has been in the forefront of technological progress, the Airway Science curriculum is demanding and rigorous. Of all the education programs within aviation, Airway Science has the best chance of meeting the education and manpower needs of the future airspace system. The traditional nature of the program is expected to attract students who might otherwise go into other areas of study. The non-traditional aspect of the program will keep the program interesting and exciting for its students. An interested student is an inquisitive student, and an inquisitive student is a student who learns. And lastly, the interdisciplinary character of Airway Science will integrate learning so that Airway Science graduates will have broader perspectives about the aviation industry and, indeed, the world.

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AN INTEGRATED APPROACH TO DEVELOPING A MINOR IN BUSINESS

BY

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Introduction

The history of business education in the American university system dates back to 1881, when Joseph Wharton presented the University of Pennsylvania with a gift to establish the first American school of finance and economics. Despite the indignant reaction it provoked, and the criticism that remains today, the demand for business education grew rapidly, and by 1955, business had become the most popular undergraduate major (Cheit, 1985). That attraction has remained. A recent study of incoming freshmen conducted by the Cooperative Institutional Research Program at the University of California at Los Angeles found that 24.6 percent of freshmen hoped to pursue business careers. Critics of business education argue that such students are more concerned with employability upon graduation rather than career concerns, and point out the mounting evidence that liberal learning outcomes are essential to successful business careers (Jones, 1985).

An analysis of student enrollments at Oswego shows that 25% are declared business majors. A comparison of the academic programs on campus would categorize the department of Business Administration as a "cash cow" (Kotler & Fox, 1985). As a result, access to business courses has been virtually restricted to declared majors, relegating a minor to impossible dream status.

One approach to this situation is to apply more liberal learning to business education (Kantrow, 1986). Management is a subject to which the liberal arts and sciences can contribute profoundly. But contributions can go the other way as well. Management is a subject which can contribute substantially to the revitalization of teaching and research in the arts and sciences (Butler, 1986). It is this second approach which forms the basis of this paper. The authors believe that the development of an integrated minor would be useful in reducing the declining enrollments in liberal arts, allowing students to obtain the broad liberal education they feel they need.

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On several occasions over the past 10 years, members of Business Administration at SUNY Oswego have examined the feasibility of a minor in business. The major obstacles to a minor program at Oswego have been limited human resources, stringent economic constraints and ever increasing numbers of business majors. These are persistant problems faced by many business administration programs.

Because of the unabated demand for business degrees, the clamor for business courses by non-majors has been unattended. While the number of business majors at Oswego has steadily risen, the desire for access to business courses by non-majors has increased as well. Arts and Science faculty have repeatedly requested that a business minor be developed. Fortunately, time and circumstances have sufficiently changed to create an opportunity for a minor program in business.

The interplay of several motivational factors makes a business minor at Oswego more feasible at this time. The college remains committed to strong emphasis on liberal education and it is believed that a business minor may strengthen overall enrollment and retention. As Miles (1985) notes, a business minor can serve as useful preparation or as part of the general education of liberal arts students as they pursue careers in a variety of professions and arenas. Further, in agreement with Jones (1986), a fragile foundation now stands that encourages new connections between liberal learning and business study. It is this foundation that we are seeking to build upon and to strengthen. In that regard there appears to be administrative and faculty support to limit the number of business majors. Such reduction will be necessary to make room for non majors since no increase in faculty lines is possible.

The thrust of development has been to use an integrated approach. Interaction between professional and liberal disciplines is a popular topic nationally, and is much discussed and desired at Oswego as well. It is hoped that collaboration between disciplines will foster dialogue, enhance the research climate and result in offerings more sensitive to students' academic needs. As planned, the business minor would yield benefits in this area. Consultation will be necessary because representatives of other academic departments with business faculty will act in concert to administer and take responsibility for advisement. As the program is projected each student will take a core of business courses and through electives, tailor the program to his or her individual needs under advisement. It will be an interdisciplinary committee which will approve the choice of electives.

Model Design

In designing the model for collaboration, several systems and types of structural relationships were examined. Most notable in this examination were the dynamic relationships described by Jonathan Briodo in his (1979) article Interdisciplinarity: Reflections on Methodology. Briodo stressed the sense of mission and the potential of interdisciplinary tasks requiring ingenuity and creativity to arrive at mutual solutions. Our model (Figure 1) depicts a circular flow for needs assessment and integration. In addition, it reflects our hypothesis that integration occurs through communication, cooperation, and participation which are continuous processes having potential of movement in both directions. The Business Administration Department provided the impetus for planning and development by designating a committee to coordinate the total minor effort. The committee then assumed the responsibility for maintaining a sense of mission and fostering the interdisciplinary relationships. An informal method of evaluation of the model was used to assess communications process and interaction between the committee and the individual departments. Indications of intuitive and insightful discussion within and between, departments were assessed as indications that the model was working successfully.

Research Strategy

Preliminary to the design and development of such a program, it is necessary to study the needs of students, departments, and programs. We identified two specific purposes for our research: 1) to study the impact of the Business Administration minor on the college's mission of strong liberal education and other aspects of college operations, such as enrollment management, and 2) to study the interdepartmental relationships that would occur in the planning and development process. The degree of interest and support demonstrated by other departments would be indicators of their commitment during the implementation stage. In addition, the minor development committee believed that an integrated minor could be developed if the arts and sciences departments clarified their students career development needs.

1. Phase I - Exploratory Research

In this phase, the development committee met with the academic deans to discuss the minor in Business Administration. The purpose of the meetings was to outline the proposed program and to gauge the degree of administrative support.

As a result of these exploratory discussions, the development committee was encouraged to move forward. The academic deans conveyed administrative support. Discussions focused on the program's value to liberal arts majors and students' needs. Administrative and departmental concerns were also raised.

2. Phase II - Survey

The second phase utilized a questionnaire which was distributed to all arts and science department chairs. The primary purpose was to clarify the degree of interest and support among the departments. A second purpose was to assess students curricular needs and the variance of those needs.

Since there are only 19 arts and science departments, a census was utilized rather than a sample. It was also the development committee's intention to encourage departmental participation in all stages of the program development process.

Survey results have indicated a mixed review. Eight departments responded through official channels (via the survey). Four responded through direct contact with the department of Business Administration.

Responses to the type of program that would best serve students' needs were also mixed. Two minor options were indicated: 1) a mini-major and 2) an integrated minor. About half of the responding departments preferred a minor with integrated coursework; the other half preferred the mini-major concept.

Courses and topics suggested within business were scattered over the range of traditional business coursework, (e.g. marketing, law, accounting). The same was true in complementary areas such as mathematics, speech and composition.

Of concern to the committee was the degree of support and willingness of departments to participate in such activities as team teaching, advisement, curriculum development, program promotion and applicant selection. Support appeared to be polarized - either low support or high support.

Model Implementation

As our model indicates, a strong initiative by the Department of Business Administration coupled with an emphasis on integration leading to an interdisciplinary effort was our expected developmental mode. However, as Robert L. Scott (1979) stated in Personal and Institutional Problems Encountered in Being Interdisciplinary "these means of interdisciplinarity raise, and often beg, the question of just where (and when) integration will occur." We encountered such a situation - with some departments desiring to explore cross-discipline situations and others preferring to stand apart from all developmental activities. We concluded that this was actually a function of heightened awareness in some areas as opposed to others. The planning committee was encouraged by broad administrative support and decided to move forward with those departments showing greatest interest while continuing to keep all departments highly informed of all developmental effort.

Initially, it was believed that the coursework for the minor could be interdisciplinary with a high degree of participation from the arts and sciences departments. As the program proposal continues to be developed, the minor development committee has found that integrative coursework is a more realistic and feasible option. However, the planning and design functions of the committee continue to be of an interdisciplinary nature.

Three departments have been selected for use in the development of sample programs. They are Art, Chemistry, and Computer Science. These departments were selected based on their interest in participating in the minor program and the diversity of their disciplines. As a result of the business department's plans for the minor, it appears as though ideas have been sparked for the development of other integrative and possibly interdisciplinary programs. The Computer Science department is now considering the cross fertilization for the development of a management information systems program.

Members of the minor development committee have found that interested departments are willing to cooperate and facilitate program planning. Frequently, committee members are asked about the status of the program and the date for expected implementation.

Current Status

At the present time, the committee is drafting the mechanical aspects of the program which are necessary for implementation. Support for the concept of a minor in business was expressed by a large majority of the department faculty. However, that support did not come as easily as expected.

The committee faced greater resistance and polarization within the business department than was anticipated. On the other hand, support from the arts and sciences departments and the administration came more readily. There appear to be several reasons for this.

First, the arts and science departments have been eagerly awaiting (begging for) access to business courses for their students. Second, some faculty in the business department remain traditionally oriented and prefer the minor to be mirrored in the image of the existing major. Frequently minor programs in business are mini-majors. Third, faculty in business at Oswego are already burdened with large numbers of advisees, large classes, and increasing enrollments which have not been supported with additional faculty. Last, many faculty expressed concern that program integrity would be jeopardized by allowing courses from other disciplines to be incorporated into the minor.

Other factors, which heightened the polarization and resistance to the minor included past promises by the administration of decreasing enrollments of business majors that were not fulfilled, concern for the degree of participation that other departments would be willing to give, and opposition to change.

The development committee is making the final revisions on the proposed minor. The minor (shown in Appendix 1) will have two options. The first option is designed to assist students who desire career application of the coursework upon graduation while the second option is designed for those who plan to enroll in a graduate program in business at a later date. Final revisions of the proposal will be submitted to the department first for approval and then to the Academic Policies Council at Oswego.

At this time, it is planned that each student will develop a theme based on his or her major and a set of objectives. We forsee that through thoughtful selection of electives, a student will plan a course of study to complement the major area. Thereby, the mix of courses will be tailored to individual needs. However, though each student will participate in the choice of electives, advisement and approval will be required to insure clarity of the theme and accomplishment of stated goals. Advisement of students and approval of the students' course plans will rest with the minor advisory committee, which is discussed in the following section.

In addition, the committee is developing procedures for selecting and admitting, students who will minor in business. It is anticipated that the selection process will be competitive with academic achievement as the major criteria. Members of the advisory committee, working with participating departments will be involved in this process as well.

The department of business administration has already submitted a plan for projected enrollment decreases and the administration has indicated support. In addition, the admissions office has agreed to adjust its recruiting efforts and acceptance ratios to be commensurate with the business departments projections.

Minor Advisory Committee

The minor development committee recommends that an advisory committee be formed to act as the governing body of the minor program. More specifically, it should be charged with the responsibility of meeting periodically for the purpose of:

1. facilitating cooperation among participating departments
2. facilitating coursework integration
3. insuring program integrity
4. reviewing and approving student course selections
5. reviewing and approving revisions to student course selections

It is suggested that the advisory committee be comprised of seven faculty members. The department of Business Administration will be assigned two seats-one meber being the Minor Program Coordinator and the second member to be the Business Administration department's reresentative to the advisory committee. Initially, allocation of the remaining five seats may be determined by those departments expressing a willingness to participate in the developmental stages of the program.

As the program evolves, however, the allocation process of the remaining committee members may require a more formalized selection process. Participating departments may consider grouping themselves into related discipline areas with each area selecting a representative to serve on the advisory committee.

In order to maintain consistency with other college committees, it is suggested that each committee member serve a two year term. The terms will rotate on a random basis to provide continuity in the decision making process.

Departments wishing to participate in the minor program will be asked to assist in the competitive selection process to admit students and also to assist in advising those students. It is also expected that participating departments select a representative to serve on the minor advisory committee.

Long Range Impact

Of particular interest to us are the long term effects on the students and the college. We expect to assess and continue the project with further study. Specific questions which are to be the thrust of future work are:

1. At full implementation, is demand less or more than anticipated?
2. What is the impact on admissions and retention in Arts and Science disciplines?
3. What is the impact on the Business Administration Department's resources and the effect on its majors?
4. Are the demands for resources in other areas met?
5. What are the short-term and long-range benefits to participating students in regards to career preparation, placement and advancement?

It is expected that approximately 100 liberal arts and other students will be immediately affected when the minor is implemented. In subsequent years the number may increase to as many as 500.

We are committed to implementing such a Minor in Business at the earliest possible date. However, full participation of other disciplines may not be completed at that time. Once in place we foresee an on-going and growing program offered every semester.

A successful program at Oswego could very well be a model for such collaboration on any campuses where business schools or business departments are present. Certainly, it could be used to help evaluate and revise business minors at the colleges where they are now in place. Additionally, the concept and process of developing and establishing such a program, with an integrated approach (yet not really interdisciplinary), may be pertinent to the development of minors in other areas of study, perhaps in Economics, Philosophy, Psychology and many others.

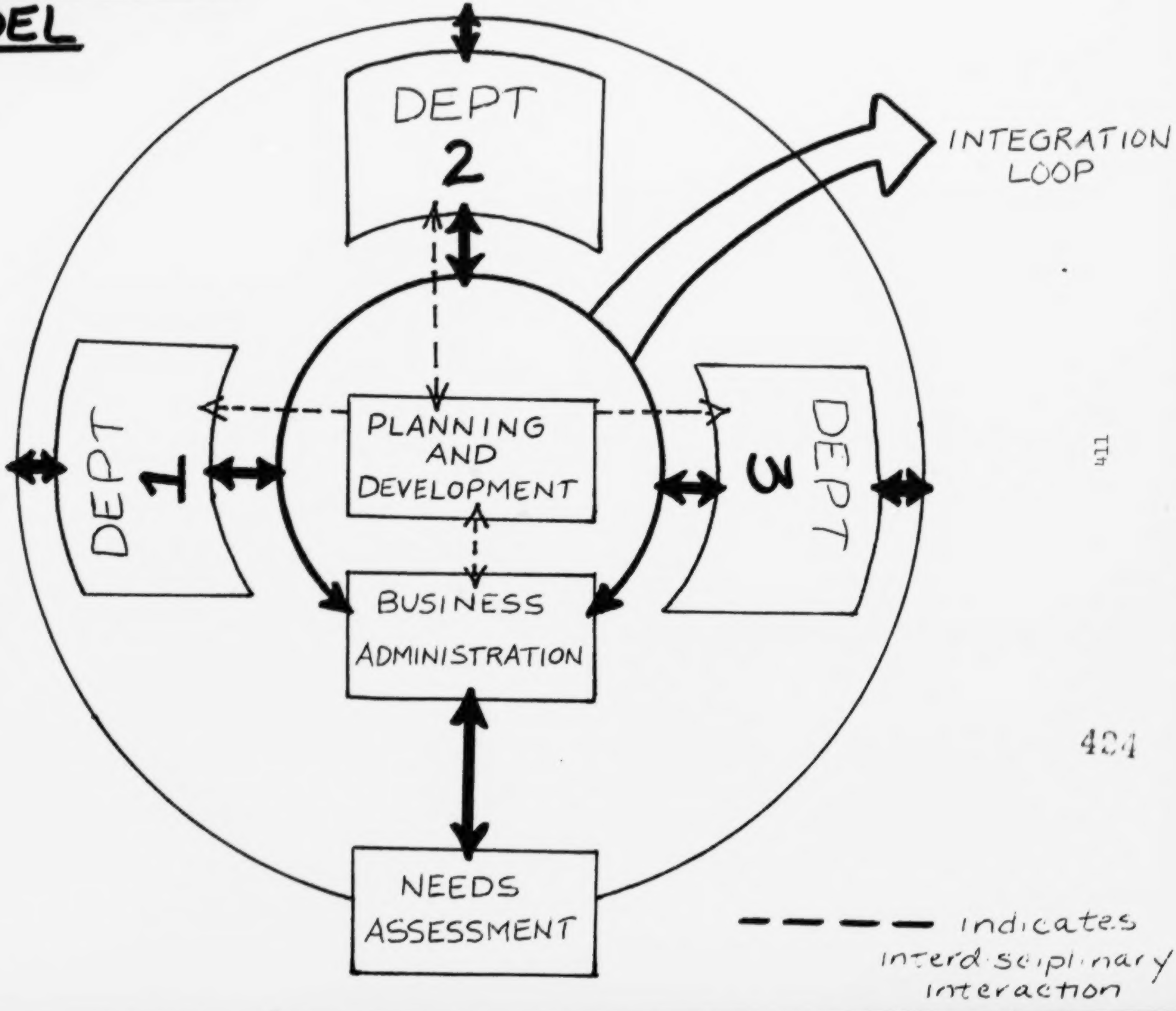
Conclusion

The Department of Business Administration in cooperation with the Departments of Computer Science, Economics, Mathematics, Psychology, and Sociology previously developed a graduate program (Master of Science Program in Management) based on an integrated approach. As such, the department and SUNY Oswego have extensive experience in successful cooperative developmental efforts.

The concept of an interdisciplinary program is certainly not new. However, the focus on integrating the concept throughout the planning, development, and implementation stages of a minor program is an innovative application. It appears that participating departments and many other aspects of campus concern should benefit by this type of approach to program development.

COLLABORATION MODEL

Figure 1


DEPT 2
INTEGRATION LOOP
DEPT 1
PLANNING AND DEVELOPMENT
DEPT 3
BUSINESS ADMINISTRATION
NEEDS ASSESSMENT
– – – – indicates interdisciplinary interaction

Department of Business Administration
Division of Professional Studies

Appendix I

Business Administration Minor: Program Option 1					21 sh
A.	Core Requirements			12	
	BUS 250	Marketing Principles	3		
	BUS 261	Business Organization	3		
	BUS 315	Survey of Accounting	3		
	BUS 346	Legal Environment	3		
B.	Electives			9	
	One 300 or 400 level course in Business Administration.		3		
	Two 300 or 400 level courses as approved by advisory committee.		6		
C.	Cognates				
	None designated. See notes below.				

Business Administration Minor: Program Option 2					21 sh
A.	Core Requirements			15	
	BUS 201	Accounting I	3		
	BUS 202	Accounting II	3		
	BUS 250	Marketing Principles	3		
	BUS 261	Business Organization	3		
	BUS 346	Legal Environment	3		
B.	Electives			6	
	Two 300 or 400 level courses as approved by advisory committee		6		
C.	Cognates				
	None designated. See notes below.				

Notes:

1. Students may choose either program option. Option 1 is designed for those students who are interested in career application upon graduation. Option 2 is designed for those students who are interested in enrolling in a graduate program in Business at a later date.
2. Some of the upper division electives may have prerequisites. However, it is likely that those prerequisites can also be used to complete a student's major cognates or general education requirements.
3. Students may not use courses designated as core requirements for their major to fullfill minor elective requirements.
4. Course programs and electives will be approved by the minor advisory committee.
5. Admission to the minor program will be determined by a competitive selection process and the major department's participation in the minor program.

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EARNING DEGREES ON WEEKENDS

Helen Dailey

The Weekend Degree program at Edgewood College is Edgewood College's response to the diverse needs of today's working adult student. It is expressly designed for the adult seeking a degree whose responsibilities make attendance at weekday classes difficult. Classes are held two weekends a month during the academic year from August to May. Classes are three to four hours in length. The upper level courses and quantitative courses meet for four hours. Classes begin on Friday evening and continue through Saturday and Sunday on alternate weekends.

The key element in the success of any college is superior quality and imaginative teaching as stated by the renowned Alfred North Whitehead.

> The university imparts information, but it imparts it *imaginatively* . . . The whole art of the organization of a university is the provision of a faculty whose learning is lighted *up with imagination* . . . This atmosphere of excitement, arising from imaginative consideration, transforms knowledge. A fact is no longer a bare fact: it is invested with all its possibilities. It is no longer a burden on the memory: it is energizing as the poet of our dreams, and as the architect of our purposes . . . Knowledge does not keep any better than fish. You may be dealing with knowledge of the old species, with some old truth; but somehow or other it must come to the students, as it were, just drawn out of the sea and with the freshness of its immediate importance . . . *Imagination* is a contagious disease . . . It can only be communicated *by a faculty whose members themselves wear their learning with imagination.*[1]

Historical Background

Edgewood College began to plan for the weekend program during the academic year in 1978 in response to adults attending continuing education classes for non credit during the evening or on Saturdays. Reuests for courses

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leading toward a bachelors degree were heard. A study and survey of the Madison area was taken in the spring and fall of 1979. The study clearly indicated that the degree and courses most adults were looking for was in business. The weekend program was launched the fall of 1979. The majors available were in business management and accounting with a minor either in economics or psychology. I was appointed the Director of the weekend program in the spring of 1979.

Marketing the Program

Marketing the program via newspapers, radio and direct mail worked for us. However, one might ask and wonder how does one "market" the program to the faculty? This was not as easy as to the prospective students. We looked into other existing programs and sought out ideas that worked for them.

In the spring of 1978, an in-service day was held for all interested faculty. William Hill, director-interviewer-teacher-advisor in the Weekend College at Mundelien, Chicago, Illinois, spent the day with us and gave us his personal view and observations about teaching in the Weekend College. This day was most helpful and was the first of faculty in-services to follow. Once a professor has taught in the program, he or she is convinced of the challenges received from the adult learner.

Growth

Our Weekend Program began with 85 students in the fall of 1979. The enrollment has increased each semester to approximately 360 undergraduate students. The program also has expanded. Presently we offer the following majors:

Accounting
Business
Business with Management emphasis
Computer Information Systems
Criminal Justice
Registered Nurse Degree Completion
Religious Studies

Minors: Recommended but not required

Computer Science
Economics
English/Writing Concentration
Psychology

In the fall of 1985, after a two year study of the needs of the adult community, Edgewood College was given approval by North Central Association of private colleges to begin the following three graduate programs:

1. Master in Business Administration
   Fall semester 1985

2. Master of Arts in Religious Studies
   Spring semester 1986

3. Master of Arts in Education
   Fall semester 1986

I was appointed the Director of the graduate programs May, 1986. This semester there are 230 adult students in the graduate programs. The graduate courses are offered on weekends utilizing the same format as the undergraduate program as well as evening due to the needs of the students. Flexible scheduling is important to the adult student and a MUST if a college/university is to be successful in meeting their needs.

When the master degree program was being designed by the Graduate Committee, the question arose on how would the Master's Degree Program represent the College's tradition of liberal arts and mission in higher education. Two interdisciplinary courses, ethics and studies in change, were designed to fulfill this aspect of the College's mission.

Characteristics of a Weekend Program

The format of a Weekend College or Program differs from one college to another. However, no matter what format is used I believe the characteristics of the program are the same.

Intense
Classes are compact
Class time is limited

These characteristics necessitate the following:

Larger block of course content
Careful course planning
Attention to learning process and learning under pressure
Control of classroom time
Support systems

At Edgewood College our classes meet two weekends a month for ten weekends. When we first began the program in 1979 we met for only eight weekends. As a result of both oral and written evaluations sumitted from the students and faculty each semester, we increased the contact hours.

Adult learners are for the most part full time working students for whom going to school is neither the only priority nor the primary life activity. These students lead varied full lives while seeking a formal education. They enrich themselves and their learning experiences with a wealth of lived experience. This enables the creative teacher to draw from these experiences. Thus, bringing to their classes an enrichment that one does not find in the traditional classroom.

Support Systems

1. Academic counseling

2. Career Planning and Placement services provide a sound basis for career transition and successful entry into suitable career positions

3. Experiential and Credit for Prior Learning services access a wide range of career related skills, knowledge, and attitudes as a basis for individual student academic program planning.

4. Monthly socials

5. Networking of the Adult learner - Study groups

6. Study Skills Program

Concepts Related to Teaching and Learning and Their Application to Adult Learners that Need to be Considered in Planning a Weekend Program

Achievement - Adults need an immediate sense of accomplishment. Learning experiences need to be challenging, but not frustrating.

Application - Application is greater if new topics are studied in relation to the context in which they are to be applied. The more immediate the application the greater the potential for learning.

Attendance - Adults are voluntary learners and continue to attend programs if they meet their needs. Keep necessary records for administrative purposes.

Course Content - Learning content should relate directly to intended outcomes. Courses should be organized in small units using appropriate sequence to facilitate effective learning.

Evaluation - Adults prefer immediate reinforcement. Assess progress of each learner often and advise immediately of results. Self-assessing procedures should be used continuously.

Experience - Adults have an extensive experience base. Capitalize on individual experiences relevant to the instructional content. Use experienced learners to assist the learning of others.

Failure - Adults are concerned about their abilities to do well in a learning situation. Minimize their chances for error. Provide continuous support and encouragement in assessing progress. Networking is important.

Group Instruction - Adults prefer to work in small groups to maintain close social exchange. Small groups can offer support and encouragement for the individual members.

Guidance - Learn about each student so that support can be offered. Develop strategies to maintain individual contact during the time span of the course.

Individual Differences - Adults display a wide range of individual differences as a result of their different life experiences.

Interaction - Adults prefer informal settings where interactions with others can occur. Create an informal learning environment and encourage members to exchange ideas and assist one another. Plan informal discussions, small group activities, etc.

Learning Ability - Adults retain the ability to learn throughout life.

Learning Objectives - These define the appropriate behavior to be attained after learning. A learning objective is prepared for each major task or topic in the course. The objectives communicate to the learner what he or she will be able to do after instruction.

Learning Environment - Adults prefer an informal setting and opportunities to socialize while learning. Utilize learning activities such as small group demonstrations, working groups, peer teaching, etc. Encourage exchanges between learners. Encourage learners to assist one another.

Learning Style - Individual adults have preferred learning styles. Determine the adults' preferred learning style(s) and use techniques that are related to the preferred style. Develop learning materials and aids to accommodate each learning style.

Motivation - Adults are highly motivated when they enroll in a course or program. Present relevant content, arrange active participation, provide support, reinforcement, and other appropriate activities to maintain this level of interest.

Organization - Adults expect a program to be well organized. Develop a well planned program, but remain flexible enough to adjust to the needs of the total group and each individual in the group.

Recall - Recall is best when material is learned in a context that is similar to the one in which it is to be used.

Relevance - Motivation and application is improved by learners interacting with realistic learning materials. Provide practice on realistic materials. Content and examples need to be up to date.

Residual Effect - Adults have a residual accumulation of school experience, everyday living and information acquired from listening, looking and reading. Find out about each individual and assist each person to build on prior information. Make use of an adult's expertise whenever practical in the instructional activities and to assist other learners.

Reward - Adults may have negative feelings and ideas developed over the years. Success and satisfaction in learning will assist in overcoming this attitude.

Self-concept - Some adults need to discover that they can learn and that learning can be a highly rewarding experience. Success and accomplishment in learning will assist in improving attitude toward learning.

Self-paced - Adults vary greatly in their individual rate of performance. Take advantage of video taping when appropriate.

Simple-to-Complex - Effective learning is enhanced by progressing from the simple to the complex. Prepare learning activities that start with simple concepts and proceed in logical steps to the complex.

Social Exchange - Adults prefer informal settings with opportunities to socialize. Create an informal learning environment. Plan for coffee breaks, informal discussions, small group activities, etc. to maximize social contact. Members of the group can assist in helping others learn and provide moral support and encouragement.

Success - Immediate success and satisfaction may be necessary to overcome years of negative findings about learning. Plan for learning activities that provide immediate and continued success. Maintain a close supportive role to guide learners to assess progress in a positive way.

Teacher Preparation - Adults expect teachers to be well versed in the subject content and to be qualified instructors. Therefore, instructors need to be competent in the content area. Utilize the vast experience of the group members to add to the practical application of the material. Learn about adults and adult learning.

Time - Adults have many demands on their time. Utilize their time efficiently by providing appropriate learning activities that allow each individual to progress at his or her own rate. Manage time effectively by providing timely and continued guidance and assessment of progress.

Variety of Techniques - Three hour lectures are discouraged. A mixture of familiar techniques: lecture, discussion, question and answer, working in small groups, films or tapes (when appropriate), guest lecturer enhance the adults' learning.

Conclusion

In conclusion, I would like to state that the weekend format has proven to be one that enables the working adult to seek the education that he or she desires to attain whether for a job related reason or for a long overdue dream. These students lead varied, full lives while seeking a formal education. They enrich themselves and their learning experiences with a wealth of lived experience. This enables the creative teacher to draw from these experiences, thus, bringing to their classes an enrichment that one does not find in the traditional classroom.

It is important that the administrative structure be flexible, open and one that fits the schedules of the adult working students in their pursuit of knowledge. Flexibility is not always easily attained in the academic setting. However, it is necessary if a program is to be successful. I have found that administration, faculty, and staff have gradually become to accept the fact that office hours and policies for adult student learners need to be flexible. The non traditional or adult student learner does have different needs. If the institutional climate, which in its prizing of the liberal arts, seeks quality and imaginative teaching to enhance the professional programs in the midst of a flexible structure, it will be successful.

End Note

1. Whitehead, Alfred North. The Aims of Education, Free Press, 1967.

CLOSED OUT ON WEEKENDS: CAN COLLEGES ADJUST TO NEW CONSTITUENCIES?

Roberta Goldberg

With the growth of the adult student population, colleges are developing non-traditional programs to fit the academic and professional interests as well as the schedules of working adults. As a result, some of the biggest problems facing non-traditional programs involve getting genuine institutional commitment in the form of adequate budgets, appropriate academic programs and student services. This is especially true if classes are held at unconventional times such as weekends, or if a commitment to unique evaluation procedures such as experiential learning or advisement of adult students is required.

In examining these issues we first have to understand what is important to adult students as well as what the limits are in the institution's ability to respond to students. While adult students have a wide range of interests and needs, there are really only a few basic areas that encompass most of what is important to them as they pursue their education. At the same time, institutions vary in their commitment to adult students. Nonetheless, if a program involving non-traditional students is to be successful, institutions must be able to provide these students with quality academic and other services.

What is Important to Non-Traditional Students?

Many non-traditional students, particularly those attending evenings and weekends work full time and consider their careers (present or post-degree) as a priority. In our weekend program over 90% of our students are employed full time. Their status in the work force affects their commitment to education in general as well as in selection of courses of study, expectations of their professors and course content. In concrete terms, this means that students expect the courses they need to be offered at convenient times and on a regular basis to enable them to complete their degrees as quickly as possible. Professors are expected to be appropriately prepared, consistent in presentation and able to utilize class time to the fullest. Students may complain when professors let classes out early, implying that one is not getting one's money's worth. Alternatively, since time is at a premium, there may be complaints if the required course work is more than the student feels she can handle, and there is a

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tacit assumption that one can miss an exam or hand in assignments late due to outside obligations.

While such expectations may seem contradictory, what students are telling us is that outside work experience is the standard against which academic experience is judged. For adult students not only should the academic world perform like the business world, the business world will always take priority over academics. Nonetheless, adult students want to be considered viable members of the academic community and see an intrinsic value in obtaining a degree from a quality institution. It is important to note that while job advancement or career change is an important consideration when returning to college, most students also seek a college degree for personal fulfillment. Among our student body, 75% indicated that personal fulfillment as a major reason for entering our program.

Since many returning students are women, expectations are tied to careers in gender-based ways. Given the sex segregation of the labor market, many women are trying to move out of clerical and service positions into management or professional occupations, and see a college degree as the ticket to more respect, prestige and money.

Family status also plays a significant role. In a women's college such as ours, family responsibilities often stand out when students are considering their courseloads and finances as well as their long-term goals. Seventy-three percent of the married students and 36% of the non-married students (including single, separated, divorced and widowed) have children living at home, many of whom are under ten years old. As in the labor market, many women students have a history of starts and stops in college, taking courses here and there as family status and responsibilities change over time. This pattern results in a grab bag of courses, little direction and much frustration with routine expectations of the academic environment. Once back in school, family responsibilities may determine if class assignments get turned in on time or even if a semester gets completed. When reviewing applicants' transcripts from previous colleges, it is not unusual to come across only A's, F's and W's. The F's often represent the last-minute dropping out of someone whose family life was in crisis. Further, if jobs don't satisfy and family roles frustrate, a disproportionate amount of emphasis is placed on success in college. There is a great deal of self esteem tied up in school performance, and to students, this success is reflected almost entirely in grades. Without understanding the relationship between grades and self esteem, it is hard to comprehend why many adult students believe any grade less than a B is considered a failure.

In summary, non-traditional students have a range of responsibilities, interests and goals tying educational experience to the rest of their lives. It is crucial to remember that when faced with the need to prioritize, an adult student will invariably place job and family responsibilities ahead of education. With that in mind, what can institutions of learning do to provide appropriately for non-traditional students?

Appropriate Academic Programs

Most colleges and universities understand that adult students seek degrees to enhance their careers and thus offer programs that promote career goals. Not surprisingly, as with younger students, Business Administration is the most common major selected. There is a tendency to shy away from liberal arts. As can be seen in the table below, in our weekend college program Business Administration comprises nearly two-thirds of the declared majors. Among the remaining majors, the distribution is fairly evenly divided.

DISTRIBUTION OF MAJORS

MAJOR	NUMBER OF STUDENTS	PERCENT OF TOTAL
Business Admin.	244	63%
Sociology	33	9%
Public Affairs	28	7%
International Studies	25	6%
Education	17	4%
Economics	14	4%
Other	6	2%
Non-Degree	20	5%
TOTAL	387	100%

Beyond the obvious reasons for heavy enrollment in business programs that pertain to college students overall, there are special more subtle considerations for adult students. Among the most compelling considerations is that a sizable percentage of employers give tuition support, and many only to employees taking job-related courses. As the cost of financing an education increases, the significance of employer support also increases. The reliance on employers for financial aid for education has increased considerably in the last twenty years. In 1969, 23% of courses taken by adult students were paid for by employers, whereas, by 1984, the percentage increased to 36% (Hill, Susan T. Trends in Adult Education: 1969-1984, Wash., DC: U.S. Department of Education, Office of Educational Research and Improvement, 1987, p. 15). In our program approximately 40% receive tuition assistance from employers.

While payment for courses may be represented in most academic disciplines to one degree or another, business courses inevitably get the most financial support from employers. This policy also contributes to patterns in course registration, where students opt to take supported courses first, and leave those they will have to pay for until later. As a result, a student may take requirements for her major prior to taking liberal arts courses, a reverse of what is generally recommended by most counselors. This process makes it very difficult for students to consider other majors for economic reasons, but also because exposure to the breadth of offerings is so limited. In addition, electives are often chosen in the major field in order to benefit from tuition support, thus limiting the student's exposure to elective areas. Some employers will give tuition support regardless of the major selected, and in these cases students can, and do, select a more well-rounded program. Even with such options, students often prefer to major in Business Administration because it is tied to career paths upon which they have already embarked. Even though selection of majors ultimately may not be tied to specific job prospects, there is widespread belief among students that one must choose to major in programs that most resemble their occupations. This is particularly true for the student who has already established herself in a field and wishes to advance within it.

Academic advising plays a critical role in enabling students to see the intrinsic value of liberal arts programs and their applicability to the business world. While most institutions realize that academic advising is important to traditional students, it is often assumed that older students know what they want and know how to go about getting it. In reality, not only do adult students need advice about the kinds of academic programs that may suit them, they are often ignorant about routine requirements. Equally important, since they are only on campus part time, they are not privy to the more informal ways of doing business that seem second nature to traditional students.

An important key to the academic survival of adult students in degree programs is to find ways to drive home the importance of meeting all degree requirements and to understand the value of the liberal arts. This involves more than describing the requirements or outlining a plan for courses over time. Equally important is making a convincing argument for the value of the full range of liberal arts courses available. To do this, adequate time must be set aside for advisement with counselors and faculty, giving the student time to examine her personal, educational and career goals in a single context. Unlike traditional students, adults most often have sufficient concrete experience to understand career paths, but may have difficulty tying these paths to the academic world. The converse is true of the traditional student who may be sophisticated about academia, but has limited knowledge about the work world. It is the advisor's role to show the relationship between education and careers as the job-savvy student works through her curriculum. The availability of advisors for evening and weekend students can be problematic. Specific times convenient to students must be made available, and easy access to advisors by phone an acceptable practice.

Many universities encourage adult students to pursue experiential learning credits through special programs of exams and portfolio presentations. While the intention of these programs is to enable students to receive credit for academic knowledge gained outside the classroom, many of them are not well conceived, nor do they have the full endorsement of the faculty. Often, there is little consensus as to what constitutes appropriate experiential learning, and this naturally leads to confusion at all points in the process. Further, for such a program to work effectively, the student must have easy access to faculty for consultations on specific academic areas. While there are guidelines available from educational organizations, most institutions need to examine how such programs fit within their own academic expectations of students, and design their programs accordingly.

Weekend Warriors

While the rest of academia considers weekends sacred time away from classes and students, weekend programs (and to a lesser extent, evening programs) face an onslaught of students jam-packing every conceivable type of academic pursuit, processing problem and general complaint into a very small time period. Those of us who administer weekend programs are besieged by students needing everything from sound academic advice to parking stickers. It is these moments on the front line that help us understand the degree of commitment our institutions give our programs. By definition we are crisis managers who must be prepared to handle medical emergencies, bitter complaints about perceived unfairness in grades, snow closing policies, over/underheated classrooms, and pitiful cries about lousy coffee in the lounge. A day in the life of a weekend program is the equivalent of two weeks of normal routine without support staff. While weekend and evening programs understand their special obligation to both the students and the institution, often the institution falls short of meeting the needs of its continuing education program.

The success of non-traditional programs rests in part on the ability of the institution to meet routine needs of students by being open when they are on campus. The simplicity of this necessity belies the difficulty of arranging appropriate office hours. For adult students with little time to spare, this availability becomes critical to their satisfaction with the institution and the ability of the institution to retain them. Further, adult students often need to be guided through the labyrinth of registration, tuition billing and financial aid only because they are inexperienced, and perhaps unwilling to admit that inexperience.

For administrators, understanding problems faced by non-traditional students requires attention to issues not normally faced by traditional students, and for which there may be no set policy. Some of the most common questions raised with adult students are: What arrangements can be made for employer reimbursements? What are the credit requirements for part-time students who wish to receive financial aid? What needs to be done if a student stops out for a semester or more? How can transfer credit evaluations be processed efficiently? Without attention to these areas records may languish for months and opportunities be missed are we mishandle the processing of the adult student's education.

In addition, if offices are open the staff must be knowledgeable about adult students and proactive in involving them in the life of the college. Most adult students have little time to participate in what they consider the frills of college life and are content to get through registration and classes unscathed. However, those students who become involved in clubs, sports or student government find tremendous reward in those activities and contribute an enormous amount of volunteer work and good will to the college. Thus non-traditional students should be encouraged to take advantage of the full range of activities on campus, and such activities should be made available at times convenient to all students.

Programmatic Checklists

In light of the academic interests and time constraints of adult students, I have compiled a list of questions that should be addressed if an institution is to make a serious commitment to non-traditional students. The following questions are by no means complete, and will vary in their relevance to any specific program. Some questions are aimed at the mission of a college while others are much more mundane questions of scheduling or efficiency. In any case, they should help continuing education administrators focus on the two main areas of concern addressed in this paper: academics and students services.

Academic checklist

* Do academic programs reflect the educational goals of adult students?

* Are students adequately advised each term?

* Are faculty prepared to teach adults?

* Are there sufficient support services for faculty for typing exams, providing AV equipment, contacting students, etc.?

* Are courses scheduled so that required courses don't meet at conflicting times?

* Are a sufficient range of courses available at convenient times?

* Are tutorial services available to non-traditional students?

* Is the library open conveniently?

* Are computer services available conveniently?

* Can students earn credits through an experiential learning program?

* If so, does this program have the full support of the faculty and administration in principle and in practice?

* Does your experiential learning program have a clearly delineated policy and designated leadership?

Student Services Checklist

* Are the following offices open evenings and weekends?
    Registrar
    Billing
    Continuing Education
    Women's Center
    Financial Aid
    Campus security

* Do people on duty during these times know enough about your program to serve your students?

* Are the following student services offered to non-traditional students?
    food service
    bookstore
    career counselling center and programs
    shuttle buses
    parking
    sports facilities

* Are non-traditional students encouraged to participate in
    student government
    sports
    clubs

* Do non-traditional students have a lounge of their own?

* Are there provisions for orienting new non-traditional students to the campus?

Involving Continuing Education in Decision-Making

What the above checklists imply is that directors of non-traditional programs need to be in positions in their institutions where they can guide policy and effect change. For many institutions continuing education has been unashamedly tacked onto the end of traditional programs as money-makers. Without being carefully planned and within such a restricted environment, commitment to continuing education goes only as far as its financial viability. Continuing education programs may be well-conceived and administered internally but relations to other areas of administrative decision-making can be problematic. As a result continuing education directors often find themselves uninformed about institutional decisions which affect their programs and have trouble convincing others of the value of their programs and their students. Many continuing education programs exist only if they are self-supporting, and the fight for budget dollars becomes excruciating if a particular program or semester is not successful. This arrangement lends itself to inconsistency in program planning and leaves little room for innovation. For a non-traditional program to work well, it must be seen as a serious part of the mission of the institution with a realistic budget commitment and a role in decision-making at all levels.

GENERAL EDUCATION AND JOB TRAINING FOR THE UNEMPLOYED/UNEMPLOYABLE: A ROLE FOR HIGHER EDUCATION?

D. Malcolm Leith

Economic changes necessitating more advanced training for employment have worsened the plight of unemployed/unemployable adults, with a recent commission of business leaders and educators warning, "This nation may face a future divided not along lines of race or geography, but rather of education."[1]

How can general education and job training be combined in a delivery system enabling unemployed/unemployable adults to participate in the economic and social mainstream? And how can higher education contribute to this process?

A Washington, D.C. training program for entry-level clerical workers which, although outside the established education system, effectively delivers general education and job training and placement provides one model for higher education institutions seeking to serve unemployed/unemployable adults. In addition to achieving its primary objectives of grade level advancement and job placement, this program, through a teaching method based on an interdisciplinary approach to the curriculum and individualized learning, produces job-ready students who demonstrate broader competencies looked for in potential college students.

The program is sponsored by the District of Columbia Department of Employment Services (DOES), which has contracted with private training companies to furnish instructional and job placement services under one year contracts. Funding is provided by both the local and federal governments. This working together in public-private partnership means resources are not duplicated, enabling the expertise of both partners -- DOES expertise in analysis of unemployment and in community organization; training company expertise in instruction -- to be fully directed to solving the unemployment problem.

This paper describes the DOES contracted clerical program designed and implemented by Automated Information Management, Inc. (AIM). This program has three sequential sub-programs -- i.e., general education, clerk-typist, and on-the-job training -- each

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with its own objectives, and each requiring a higher level of skill or experience than the previous sub-program. AIM is reimbursed by DOES as the specific objectives are achieved. Participants may enter the sub-programs either by testing at the required skill level, or, in the case of clerk-typist and on-the-job training, by graduating from one of the previous sub-programs.

In the general education and clerk-typist sub-programs, participants must be unemployed immediately prior to entering. Training in these two sub-programs takes place five days a week, six hours a day. Participants, most of whom are women (welfare mothers, unemployed unskilled or semi-skilled workers, homemakers seeking to enter the job market), receive weekly $35.00 stipends to cover carfare and lunch. The AIM program is staffed by a director, training site supervisor, counselor, subject matter instructors, and clerical support.

Entering participants must have scored not lower than fifth or sixth grade levels on a DOES-administered reading test. (The program's own standardized tests, however, show some entrants scoring lower than fifth grade in mathematics.) Some entering participants have scored at twelfth grade level in reading, although none has scored higher than tenth grade level in mathematics. Participants are divided about equally among those who have a high school diploma or equivalency degree and those who do not. Participants range in age from 19 to the mid-fifties.

The curriculum for the general education and clerk-typist sub-programs consists of typing and introduction to word processing; basic mathematics, reading, and writing skills; and job search. (The on-the-job training sub-program is job-specific and therefore does not have a general curriculum.) General education objectives include typing at least 40 words per minute and advancing at least two grade levels in reading vocabulary and mathematics computation. The final clerk-typist objective is actual job placement. Participants are also prepared for the Civil Service Clerical Abilities and Verbal Abilities Tests, and, in the case of those not having a high school diploma or equivalency degree, for the high school equivalency examination (G.E.D.).

The AIM program consistently achieves training objectives and placement for at least 85% of its participants. In general education, many participants advance two to three grade levels in basic reading and mathematics skills, with some advancing as many as six or seven grade levels. Most clerk-typist graduates have government jobs, while others enter the on-the-job training sub-program through which they obtain private sector employment.

Significant in terms of integrating a program like AIM's into a higher education setting are the broader competencies obtained by AIM students, namely: a greater sense of self-direction; knowledge of how to learn (questions to ask, responsibilities to take, discoveries to anticipate); ability to reason and think critically. Students demonstrate these competencies in the way they initiate discourse in the classroom and in the level of active learning achieved. Discourse -- a give-and-take of questions and explanations both among students and between students and the teacher -- is usually initiated as students attempt to solve problems they confront in the curriculum. Explanation from the teacher is usually in terms of general principles and analogies which force students to reason out the solutions to the particular problems they have raised. For example, in mathematics when students ask why their solutions to a particular problem in addition of fractions are incorrect, I may state in algebraic terms the general principle for addition of fractions. Students then review their work from the point of view of finding any discrepancies between what they have done and the general principle. I have often heard students say as they begin to work through such explanations, "When I see this, I'll wonder why I didn't see it earlier." Thus students show that they have come to trust that learning mathematics is rational, not mystical. This attitude demonstrates a potential for higher education.

Interdisciplinary Approach to Curriculum

How are these results -- grade level advancement, attainment of higher level competencies, job placement -- achieved? One means is an interdisciplinary approach to the curriculum. All aspects of the curriculum relate to participants' main goal in entering the program: to get a job. This employment focus is used as a stepping stone to more general learning. For example, in learning spelling rules in preparation for the Civil Service examination, the discussion of similarities and dissimilarities in word structures leads to discovery of root words. This in turn leads to discovery of how words are generated, and to a host of questions which again demonstrate a capacity for higher education: Why are certain languages the root of English? Why are other languages not? How do languages grow and evolve? What are the forces and developments affecting English today? What are the social and political implications of these questions of language development?

Also teachers consciously work to interrelate the various subjects in the curriculum -- reading, writing skills, mathematics, typing, job search. For example, typing drills are conducted in such a way as to reinforce spelling; solving word problems in mathematics becomes a means of reinforcing reading techniques; writing skills are a key to the job search process. Through this teaching method, students come to see that logical processes underly all their subjects: e.g., deduction and induction in problem-solving not only in mathematics, but also in reading; consistency, accuracy, and clarity not only in written but also in verbal communication. This growing recognition of learning as rational elicits from students the feeling that learning is possible for them, and this in turn inspires in them a commitment to learning.

Individualized Instruction Method

A second factor in producing effective student performance and attainment of general education competencies is the program's individualized instruction method. The curriculum as a whole is structured around sequential objectives which lead step by step to placement, the final objective. (As stated earlier, AIM is reimbursed as the sequential and final objectives are achieved.) The activities for each objective are formulated in learning modules -- self-contained units of instruction ranging from basic skills through secondary level subjects, and comprised of multi-media learning resources -- through which students can proceed at their own individual pace. The result of individualized instruction, when combined with the interdisciplinary approach to the curriculum, is a sense of self-controlled discovery on the part of students which stimulates students to sustained learning, motivating them to pursue module after module in the curriculum.

This self-paced, individualized learning is assisted by an open-exit, open-entry enrollment process in which students can leave the program as soon as they complete objectives (and, in the case of the clerk-typist sub-program, get a job), with new students taking their places as often as once a week.

Through self-pacing, students are faced with the problem of determining their own interim priorities; and in solving this problem, they gain positive experience in controlling their own learning. When students complete sets of program objectives, they partially break out of the established classroom schedule, developing, with the aid of program staff, their own individual schedules, thus further enhancing their control of and responsibility for their own learning. Ultimately, the established schedule is transcended entirely. This occurs when students complete the skill and academic objectives, and enter the phase of the program called "job search." At this point, apart from a weekly group "job search" meeting, these students determine their own schedules for taking the Civil Service exam, writing resumes, filling out job applications (including the federal SF 171), going to interviews, and so forth. This self-managed learning results in gradutes who have a sense of self-direction and self-confidence, qualities which both help graduates locate jobs and which are appealing to potential employers.

The individualized approach nurtures an attitude of continuous learning, which is a goal of higher education. It does this by helping students experience the need for continuous learning. For example, a participant who had eagerly completed the clerk-typist minimum academic objectives and passed the Civil Service exam, still hadn't met the minimum typing objectives. She was a high school graduate and didn't want to continue with academic classes while working towards the typing objectives. At this point she was guided to be on a more individualized schedule, substituting typing for academic classes. Once she completed the typing objectives, she was able to move more fully into the individualized job search schedule. As she began to face the demands made on her communication skills by the writing and interviewing processes, she became more appreciative of the need to develop these skills further and sought of her own accord additional academic help. Her initial resistance to further academic learning had resulted from her feeling that it would be irrelevant to her needs. Now, however, she recognized that learning would be a continuing need.

A Role for Higher Education

Some feel that the secondary education system should take on this task of educating the unemployed\unemployable. I would argue that higher education has at least an equal role in this task. The historic mission of higher education, especially that of the community colleges, has been more closely attuned to the needs of adults than is the secondary education system. Higher education can provide the opportunity for more continuous advancement by introducing college credit opportunities into a program which begins at the basic skills level, as is already done in college developmental studies programs in which adults with academic skill deficiencies pursue developmental studies in conjunction with an overall college degree program. Higher education includes a greater focus on the solution of community and social problems, while the emphasis in secondary education is on preparation for adult life.

Although the AIM program concentrates on basic academic skills and entry-level employment competencies, students in the program demonstrate potential for accelerated work, which work could be built into a college-based adult job-training program. The AIM program elicits this potential through its interdisciplinary approach to curriculum and its individualized learning method which are suited to unemployed adult learners who bring to the classroom concern for and experience of adult issues (e.g., employment, family, shelter). These characteristics make adults responsive to viewing their own needs (e.g., getting a job) in relation to deeper issues (e.g., the economic trends governing job availability), an aspect of the interdisciplinary approach to the curriculum. Thus job-training becomes, in the AIM program, a springboard to general education, while in a college setting, job-training could be a springboard to more advanced learning.

The characteristics of adult learners also make these students responsive to self-analysis (especially in relation to employment), and to opportunities for self-management, aspects of the individualized learning method. For example, the opportunity to experience self-control in a learning process related to employment can help fulfill adults' need for more control over their own lives and over the economic and social forces affecting them. This self-analysis and self-management are goals and means of higher education.

Higher education could relate to the adult learner's potential for accelerated work in several ways. Colleges could communicate with local job-training programs about the college-level advanced standing attainable through, for example, the College Level Examination Program (CLEP) or through the colleges' own tests. Awareness of these opportunities could motivate job-training students in an individualized program like AIM's to pursue to the fullest the individualized academic learning in their own job training, preparatory to possible college enrollment.

Additionally, institutions of higher education could develop their own individualized job-training programs incorporating a college-level component. This could be done completely within the institution, or in cooperation with an existing non-college-based training program, such as the one described here. Such an accelerated job-training program might have two phases: a non-credit phase and an optional college-credit phase. In the non-credit phase, students would develop their academic competencies and job-specific entry-level employment skills to the point of entry-level employment and/or high school equivalency (as measured on the G.E.D. test). In the second phase, students who completed the first phase would have the option to enter a college-credit program focused on a higher employment level. Such a focus would be job-specific -- e.g., secretarial/management -- with a general education component. The phase might last six months (the standard duration of a single training cycle under DOES-contracted programs), including a month for placement, with 15 semester hours distributed as follows for a secretarial/management focus:

College and Business English	3 credits
College and Business Mathematics	3 credits
Introduction to Organization Management . . .	3 credits
Introduction to Information Systems	3 credits
Principles of Supervision	3 credits

Given the individualized structure of the program, some students might finish in less than six months. Also the program might be expanded through internships, work-study arrangements, and other forms of cooperative education which would bring students into longer association with the higher education institution, possibly culminating in their earning degrees.

A continuing education division would be a logical place for such a job-training program. Continuing education has a mission of meeting diverse individual and community educational needs through developing programs tailored to those needs. It has the operational flexibility to accomodate such features as combining non-credit and credit activities in a single program, receiving reimbursement contingent on the achievement of specific performance objectives, and conducting joint educational ventures with other agencies and institutions.

The involvement of an institution of higher education in job training for unemployed/unemployable adults, including those testing at lower grade levels, can be done not only without a substantial economic outlay, but with in fact the possibility of being self-supporting. Such a program enables the institution to enhance its community profile, embrace new students, and contribute substantially to the solution of a pressing social problem.

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1. Vobejda, Barbara, "Life Without College Diploma Gets Harder," The Washington Post, 1/21/88.

"USE OF LEARNING CONTRACTS WITH (LEARNING DISABLED) ADULTS IN TELECOURSES"

Elly Miller [1]

In 1981 the Adult Learning Service of the Public Broadcasting System in Washington, D.C. announced the implementation of a telecourse program through which colleges across the U. S. could license courses to be aired by their local PBS affiliates and offered for credit toward degree programs.

As Assistant to the Academic Dean at Luzerne County Community College, and as a Co-ordinator of non-traditional programs, I was asked to implement and co-ordinate the telecourse program at my institution. Two or three years into my program, (which was well established at that point in time), I determined that in order to enjoy the optimal respect and credibility of the telecourse facilitator/instructors participating in my program, it would be wise for me to personally facilitate a course each semester.

In addition to implementing, coordinating, and facilitating telecourses, I also became a Doctoral Candidate in Adult and Continuing Education at Temple University in Philadelphia, Pennsylvania. At Temple University, I became aware of the use of learning contracts with adults at the graduate level of studies. I was so pleased to have the opportunity to select the grade for which I would work, that I decided to adapt the use of learning contracts to the telecourses which I facilitate for adults at the undergraduate community college level.

Initially, I was enthusiastic about the use of learning contracts because they encouraged learners to determine how much time and effort they would (or could) commit to their studies and their reward (in terms of a course grade) could, essentially, be self-determined.

I found that I changed the format several times before I arrived at one that was challenging but realistic in terms of the number and type of activities required for respective grades in a particular course. The format, however, is not "written in stone" and I find that I sometimes choose to change it as I develop new ideas for learning activities.

I include two sample learning contracts in my presentation so that their difference in format may be observed. The learning contract designed by Dr. Ann Williams for a psychology telecourse provides for seven different grading options some of which emphasize or de-emphasize exams and projects, including a research paper and the writing of abstracts.

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The learning contract designed by me for a business management telecourse provides several grade options. It de-emphasizes mid-term and final exam grades while putting the greater emphasis on project work. The project work for this particular course includes summaries of articles on the topic of management from newspapers and publications as well as summaries of television segments. In other courses, it might be appropriate to provide such options as analyses of case studies, results of in-person interviews, and other such information-gathering or research projects.

One might ask why an evaluation system which emphasizes project work, and de-emphasizes examinations, might be considered advantageous to the adult learner? The answer to that question emanates from the extensive reading on the subject of learning disabilities which I have done since my own 13-year old son was diagnosed three years ago as having an auditory processing (central nervous system) dysfunction. Many such children grow up with feelings of inadequacy which originate in the academic setting (where they often do not perform well on tests) and those feelings of inadequacy may impact every facet of their lives. The degree of their disabilities vary enormously and those with mild learning difficulties may make it through the elementary and secondary school years without being diagnosed. This, of course, was routinely the case until two decades ago, before special education became a discipline for study in its own right. Those who are diagnosed and receive support, understanding, and assistance with learning compensation techniques stand a much better chance of completing their education with their self-esteem intact. Educators who are parents of a learning disabled child, themselves, can most fully empathize with the feelings of frustration experienced by the learning disabled and those who love them the most - their parents and siblings.

It occurred to me (as the parent of a child with a learning dysfunction), that in the era prior to diagnosing learning disabilities, many students who were never diagnosed probably lacked the confidence to pursue a college education. In those days it was common, perhaps, to assume that they were "not college material." With their subsequent success in the business world, and with the growth of community colleges which appealed to adult learners (due to the economic advantage and the perception of a less threatening environment), it is reasonable to assume that many adults with undiagnosed learning difficulties returned (and are continuing to return) to the community college classroom to take care of the "unfinished business" of earning a college degree. Some of those, no doubt, are taking advantage of non-traditional options such as telecourses.

In most telecourses, instructors are, in accordance with tradition, utilizing quizzes and tests primarily as a means of evaluating student progress. For the adult learner with an undiagnosed learning dysfunction, such a limited means of measurement may be not only inadequate, but perhaps even unfair. The distant learner, by virtue of the fact that he/she does not verbally interact with the instructor on a consistent basis, should be provided some means, in addition to tests, of demonstrating mastery of course content.

The challenge becomes one of not only advocating on behalf of learning disabled people and communicating the need for a fair system of evaluation for all telecourse students, (including those with undiagnosed or diagnosed learning dysfunctions), the challenge also becomes one of transferring my feelings of empathy for the learning disabled to other telecourse facilitators who do not have the level of concern which I, as the parent of such a child, have.

Research indicates that 20 or 30 more years of study are needed to determine what causes people's difficulty in processing what they hear or read and whether an inherited learning disorder can be treated. Dr. Norman Medow, an opthalmologist, notes that an estimated seven percent of the population has some form of learning disability. (Other sources indicate that 15 percent of the population represents a more realistic estimation.) If this carries through to the telecourse population which we enroll, both in the United States and in the world population, we are speaking in terms of a significant number of persons. (Even one person who does not have an opportunity to pursue a higher education because of an inherited learning disorder is one too many!) The statistics by Dr. Medow, in relation to those enrolled in telecourses, indicate to me a a need for research and concern on the part of all of us in higher education. Because learning disabilities are not "outgrown" in adulthood, those of us involved in the administration of higher education (whether public or private) need to examine our responsibility to adults with learning difficulties. Hopefully, as we become more aware of the linkage of the two disciplines, special education and adult education, we will move forward to advance the quality of life of a great many people in our world community.

DUQUESNE'S LOGOS PROGRAM:

AN INTERDISCIPLINARY PROGRAM FOR SPECIAL ADMISSION STUDENTS

By Joseph Orndorff

Regular Admission to Duquesne University

Admission to Duquesne University is determined by the use of the standard G-Prime formula, devised to predict a student's supposed first-year Quality Point Average based on Scholastic Aptitude Test scores combined with rank in class. If the predicted QPA is slightly less than or equal to 2.0, a C average, the prospective student is usually not admitted. However, while there seems to be a high correlation between the G-Prime prediction and actual grades, SAT scores and class rank do not tell the whole story.

Duquesne University, a private school affiliated with the Holy Ghost religious order, has a declared mission to the community to reach out to those students who are often ignored or overlooked by other institutions. As a result, the university has had long experience with educational problems and the devising of solutions to those problems. Accordingly, as an alternative to regular admission, students who fail to meet the usual requirements may be considered for special admission to the university through our LOGOS program [1] which is administered by our university Advisement and Counseling Center.

Admission Through the LOGOS Program

Students are selected for possible admission into the LOGOS program after a study of the files of rejected regular-admission applicants by the LOGOS program director and the head of academic advising. If the applicant seems to have worked below ability during high-school, the decision is made to provisionally admit to the university through the program. It must be pointed out, however, that the reasons that these young people did badly in high school may not be clear when the decision to accept is made; experience shows that more likely than not, poor academic performance is merely a symptom of some more serious problem(s). In doubtful cases, the prospective student is asked to come in for an interview, but even then, there is often no way to discover whatever serious problems may have been affecting performance.

Typically, 70 - 90 students are selected for the LOGOS program, of which 50 - 60 actually matriculate. Those admitted are high-risk students, usually with SAT Verbal scores between 250 and 500, and combined scores between 750 and 1000. Despite the relatively low scores, many of these students are often quite bright. Commonly, these students do not know HOW to do well in an educational setting; in dealing with them, we stress what the Study Group on the Conditions of Excellence in American Higher Education has called the "three critical conditions of excellence": student involvement in their own learning process, high expectations on the part of their faculty, and careful assessment and feedback regarding student work. [2]

Students in the LOGOS program have been admitted into Duquesne University's College of Arts and Sciences. However, after devoting a year to the required LOGOS curriculum, achieving satisfactory academic performance, and meeting any admissions standards, LOGOS students may matriculate to a major in any of the college of the university. Courses in the LOGOS curriculum carry full college credit, will not normally delay graduation, and serve to replace a number of university and college requirements.

Student Problems Which Affect Academic Performance

As was mentioned above, poor student performance in the high school classroom seems to be a symptom of further, non-academic problems. These problems typically include many of the following, often in combination with one another:

- Bad or non-existent intellectual habits: poor study skills; laziness; lack of discipline; inadequate mastery of basic reading, writing, and math skills; etc.
- Family problems, including divorce or death of a parent
- Problems due to drugs, alcohol, etc.
- "Behavioral" problems: short attention spans; lack of self-discipline, academic endurance, desire to do well; inability to set and work to realistic goals; low expectations, excessive socializing, etc.
- Poor self-image, and related problems
- "Learning disabilities"

The university is seldom informed about any special problems, circumstances or situations involving prospective students, probably on the theory that students with drug or alcohol problems, or severe behavioral problems, for example, would not be admitted. There is also the understandable and natural reluctance to air one's problems "publicly" and the not uncommon desire on the part of the applicant and his or her family to find a new place and "make a fresh start," in the hope of leaving problems behind. Accordingly, many student problems, some of which are quite serious, may be completely unknown to us when students enter the university. Further, coping with the unanticipated stresses and strains of university life may serve only to exacerbate whatever problems the students may be bringing with them. Unfortunately, it is only after students have been in classes for several weeks that the cracks begin to show. In order to avoid or pre-empt potential problems, students in the LOGOS program are intrusively counseled and advised.

Student Needs: Minimal Academic Skills

> Dull and unteachable persons are no more produced in the course of nature than are persons marked by deformity or monstrosity. Such are certainly few. A simple proof of this assertion is that among boys, most of them show good promise. And if it turns out that this promise never materializes, it is not usually for lack of latent ability, but because care was never taken in nurturing it. You may respond that some surpass others in ability. I grant this to be true, in that some accomplish more and others less. But there is no one who does not gain by some studying. [3]

Emotional and other problems aside (but not ignored), young people who hope to do well in higher education need to be able to function in an academic environment; education should have something to do with why they are at university. It is not unreasonable for instructors and advisors to assume that students want to learn, and to interact with students based on this assumption.

In dealing with students in the LOGOS program, we provisionally make an Aristotelian assumption: doing badly is the result of bad or non-existent habits on the part of the students. Thus, the LOGOS program is devoted to providing its students with guided practice in the development of certain basic intellectual skills, with special emphasis on critical thinking and reading and the development of facility with intellectual skills related to language use. Basic reading, writing, speaking, and listening skills; self-discipline and good study habits; and a rudimentary familiarity with written culture would seem to be among the characteristics we might expect of all post-secondary students.

Not surprisingly, as their low SAT verbal scores would indicate, students in the LOGOS program are typically poor readers, and do very little reading. This problem is not limited to reading, but also extends to all of their language-use skills. As a group they have a most pressing need to develop a high level of language skill as quickly as is possible, or they face academic failure. Given the centrality of reading in education, a consideration of our approach to the reading problem would provide a good illustration of how the LOGOS program functions.

A major reason for student reading problems is that reading is usually not taught after the first few years of school, except for remedial reading for the nearly illiterate, or for those students with developmental problems of various kinds. Remedial reading is certainly not instruction in reading well, but seeks only to bring students to some common, usually elementary, level of competence. The same is true of speed-reading/how-to-study courses, which tend to be thinly-disguised remedial courses, courses to teach students various tricks to make them more 'efficient' students, or some combination of the two. Whether such courses develop critical, analytical thinkers, let alone people familiar with a cultural and intellectual tradition, still remains to be demonstrated.

Since remedial courses are usually offered to only those students with severe and demonstrable problems in reading, many students get no reading instruction at all beyond the elementary grades. As a result, many of those students who have not been targeted for remediation may still be employing grammar-school reading strategies; any improvement in their skills is often the result of their independent reading, not instruction. Unfortunately, this self-development does not often occur, and the student, out of frustration with an inability to read effectively, comes to feel that reading is a boring, difficult chore, which is best avoided, or to be done only under the greatest duress, if done at all.

Since the ability to read critically is an intellectual skill, it is learned by doing, by actually applying a number of skills and strategies while reading. According to the Project on Redefining the Meaning and Purpose of Baccalaureate Degrees, students "need to be taught how to read actively, arguing along the way with every word and assertion." [4] Experienced readers have learned to ask questions as they read, to note interesting features of the text, to draw on their experience in reading and knowledge of their culture, etc. These techniques are then articulated and combined, often unconsciously, into what we call critical reading ability. The greater this ability in the reader, the more capable he is of interacting with any text he chooses. The reader thus develops good reading habits.

Like Epictetus, in the LOGOS program we say "If you would be a good reader, read; if a writer, write." [5] Reading skill is certainly developed by reading. But, students simply cannot take several years off to read challenging material, hoping to self-formulate and internalize reading rules. Rather, novice critical readers need guided practice; in effect, an experienced reader who can sit down with them and make the strategies used in reading obvious to them. Each student should be furnished with guidance in asking, thinking about, and answering the right questions as he reads; feedback on how well or poorly he is doing; and suggestions for improvement. Give a student this kind of support and feedback and his reading ability will improve. If this coaching is done long enough, the student can possibly learn how to imitate his coach and develop his skills to the point where he can read well without guidance.

This rather extended example provides an apt illustration of how we think many of the academic problems our students have can be approached: have students practice the skills they lack until they can perform them habitually. In other things as in reading, we assume ability, willingness, and desire on the part of students -- a kind of academic virtue, or the desire for academic virtue, in other words. We emphatically do not assume that these students are incapable of learning or functioning in the university environment, or that they lack the ability to do well or need remediation. We do not assume "illness" on their part, in other words. If anything, we demand more of these students than of their first-year peers; after all, we must not lose sight of the fact that these students have been provisionally admitted, and must demonstrate their ability to do well in order to stay. Then we set about trying to help these young people create their own good habits.

Our desire to have them create good habits for themselves does not stop with the ability to do the work, or even at the doors to the classroom. Many of these students do not know how to participate in a discussion in a mature manner, for example, or cannot budget their time, or assume responsibility for themselves. Indeed, many have no idea how to function in a social setting. Accordingly, guidelines are provided, minimal standards of behavior are imposed, and students are required to act like the people they must become in order to function in the world. We expect them to be civil and moral; if they cannot, the university community is better off without them.

The LOGOS Curriculum

The LOGOS curriculum includes six credits each of English Composition and Critical Reading, eight credits of Latin, and three credits of Etymology; the remaining seven credits are used for courses in our university Core Curriculum. Every effort is made to ensure that the LOGOS courses are mutually reinforcing, liberal learner-centered, and non-vocational. Further, and where possible, each course integrates three kinds of teaching:

didactic instruction, coaching and supervised practice, and Socratic or "maieutic" questioning and active participation.

We also believe the most effective way to practice reading and thinking skills is by reading and thinking about the best written materials in our tradition, a position shared by most of the Study Group on the State of Learning in the Humanities in Higher Education. [6] Call these 'classics,' 'great books,' 'masterpieces,' whatever you like; these works are thought to be the greatest our culture has produced: writings of Aeschylus, Melville, Chaucer, Tolstoy, and so on. These texts would provide students with challenging materials, as well as a better understanding of the western intellectual tradition. You will notice the "Great Books" emphasis in the following description of courses in the LOGOS program.

Thinking and Writing (3 cr.)

Part of the English requirement in the university core curriculum, this course stresses the acquisition of good communications skills, with an emphasis on writing well. Students will study a number of models of effective writing selected from basic texts important to the western cultural tradition.

Imaginative Literature and Critical Writing (3 cr.)

Also required in the core curriculum, this course continues the development of student writing and thinking ability, with an emphasis on critical methods in the study of literature.

Basic Latin (8 cr.)

Study of the grammar and syntax of Latin, both as a discipline, and as a basis for learning how language works. The courses maintain a constant comparative tension between Latin and English, in an effort to uncover basic language structures common to the two languages, and to understand Latinate influences on English.

General Etymology (3 cr.)

The study of Greek and Latin vocabulary in an effort to understand how words are used in the English language. The method is analytic, with stress on developing an understanding of roots, prefixes, suffixes, and other linguistic structures as they relate to word meanings.

Argument Analysis (Critical Reading I) (3 cr.)

An introduction to critical reading through the reading of basic texts and the study of the grammatical and logical structures in those texts. The focus is on the reading of works fundamental to the American political tradition, ranging from Aristotle to The Federalist Papers and The Constitution.

Great Books Seminar (Critical reading II) (3 cr.)

The reading and discussion of texts representing a variety of subject matters and literary types, in an effort to develop facility in the reading of different kinds of material. Texts include Greek and Shakespearean drama, the Bible, Platonic dialogues, and other works important in western culture.

Students Unable to Perform Academically

Some students have problems of a kind so serious as to interfere with their performance of academic duties. Such problems can include substance abuse, emotional and behavioral problems, problems at home, learning disabilities, and the like. Since the LOGOS program is administered through the Advisement and Counseling Center, a network for intervention and referral already exists. Students are called in for meetings on a regular basis, and also as problems become obvious. Referrals are made to the university Counseling and Testing Bureau, Health Service, Campus Ministry, and the like, as well as to various off-campus agencies, as appropriate. Support and personal counseling is given as needed. While the student is experiencing this personal distress, academic performance is still expected -- the university is, after all, an academic institution, and students are still expected to be able to function in the classroom. It would be a disservice to the students to expect otherwise.

Sometimes, despite the best efforts of the university support staff, students have problems which are so great as to render them uneducable. Sometimes they are disruptive, violent, lazy, too ill to be in school, unwilling to be educated, etc. In such cases, there is little we can do for them. There are other educational instutitions and sources of therapy; Duquesne University is fairly expensive, geared primarily toward academics, and frankly not ideal as either a sanitarium or a vacation spot. In such cases, albeit reluctantly, their family is contacted, referrals are made, and the students leave the university.

Student Response to the Program

The initial response of students to the heavy workload and requirement to study Latin is often shocked disbelief that anyone could expect them to do so much work, despite the fact that the requirements are clearly spelled out in their letter of acceptance. But, as Mill says, "A pupil from whom nothing is ever demanded which he cannot do, never does all he can." [7] Common complaints are that they don't understand, that it is an impossible amount of work to do, that the work cuts into their social lives, that mastering basic skills won't help them become a pharmacist/marry a doctor/get a job, etc. When the instructor does not give in, complaints gradually die out, and most of the students settle in for the long haul. A small number of students, however, decide not to do the work, or even try; these student leave the program and the university, most often as a result of the usual academic processes for dealing with such situations.

Those who remain find that they can no longer remain completely passive, but must take greater responsibility for their own learning than they ever have before. After a number of bad moments, most students realize early on that they must have a plan for studying: there is far too much to finish in one sitting. The "Involvement in Learning" study observes that "student performance clearly rises to [high] expectations, and students respond favorably to reasonable challenges," [8] something which we see demonstrated continually. Regular feedback and assessment of progress occurs in all their classes, and students are urged to meet personally with their instructors to solve any problems they encounter. Inevitably, the majority of the students begins to adapt to the increased academic pressures, developing those skills which such adaptation requires: "ability to think critically, to synthesize large quantities of new information, and to master the language skills (critical reading, effective composition, clear speech, and careful listening) that are the fuel of thought." [9]

By mid-semester, students who do the classwork regularly find that the workload gets easier to manage as they develop better study habits and their ability to read and think critically increases. For many students, learning that there is a pattern and structure to written works, for example, and that careful reading and analysis can uncover this pattern, is a revelation. In finally learning how to learn, many of these students develop the ability to finally succeed academically.

A significant number of these special admission, high-risk students do very well in the required LOGOS curriculum. For example, out of a total of 62 students in the program this academic year, 10 achieved Dean's List honors at the end of the first semester. Another seven missed the Dean's List purely as a result of a poor grade in a single course (almost inevitably math). And of the rest, the great majority performed far better than their predicted QPA.

Those LOGOS students who achieve the Dean's List each semester are treated to a testimonial dinner, and are given books, each of which features a plate commemmorating their outstanding academic achievement. Further, the parents of ALL students who are doing well in the program receive short letters from the program director at regular intervals, praising student progress and effort. The parents are especially receptive to this sort of thing, since they are often quite worried about whether or not their child will be able to do well in higher education. In addition, this establishes contact with the families, who are always supportive and interested, and often thoroughly amazed that anyone in an educational setting can say anything positive about their child. And, of course, the student, succeeding perhaps for the first time in his or her academic life, responds very well to the praise, and with a sense that the praise has been EARNED.

Criticism and Defense of Our Approach

> ...mankind are by no means agreed about the things to be taught... [10]

Our approach has been much criticized. We have been accused of being elitist, of requiring too much work of the students, of asking them to read works impossibly beyond their limited intelligences and abilities. We have been taken to task for our assumption that there is a cultural heritage, and that some books are more worth reading than others, that some things are more worth knowing than others. The great number of works read has been faulted, as well as the speed with which the class moves through them. The requirement to study Latin and Etymology has been criticized. The choice of readings has come under fire: more poetry, less philosophy, little emphasis on scientific writing, absence of contemporary authors, women. And so on.

Our reply is that the LOGOS curriculum is simply, designed to help poor students become successful in higher education. While the Great Books reading list varies constantly, we cannot read every work worth reading with the students, nor can we even be expected to deal with every type of writing. The goal is to give the student practice in intellectual skills as well as the beginnings of a cultural background. It is up to the general university curriculum to continue what we have begun. We cannot save every student, only those who want to be saved, and in some cases, not even them. But, our retention rate is comparable to that of the university as a whole, and it must be kept in mind that but for the LOGOS program, none of these students would have entered our university at all.

ENDNOTES

[1] 'LOGOS,' an ancient Greek word which means, simultaneously, 'word,' 'speech,' 'argument,' 'the power of reason,' 'thought in action'; we construe 'LOGOS' to mean 'Critical Thought' or 'Active Thought.'

[2] "Involvement in Learning: Realizing the Potential of American Higher Education," a study sponsored by the National Institute of Education (1984), p. 17.

[3] Quintilian, *Institutio Oratoria*, I, 1.

[4] *Integrity in the College Curriculum: A Report to the Academic Community*. The Findings and Recommendations of the Project on Redefining the Meaning and Purpose of Baccalaureate Degrees. Association of American Colleges, February, 1985.

[5] Epictetus, *Discourses*, II, 18.

[6] Bennett, William J. "To Reclaim a Legacy," a report based on the findings of the National Endowment for the Humanities' "Study Group on the State of Learning in the Humanities in Higher Education" published in the i*Chronicle of Higher Education*, November 28, 1984, p. 18.

[7] *Autobiography* I.

[8] "Involvement in Learning," p. 20.

[9] "Involvement in Learning," p. 43.

[10] Aristotle, *Politics*, 1337a33.

MEETING THE NEEDS OF THE MILITARY STUDENT

Robert O. Riggs

It is important at the outset to delimit the scope of our discussion. This is necessary because of the extraordinary size of the American military enterprise. It is an establishment which during fiscal year 1987 spent a total obligational authority of $312 billion; this expenditure represented over 6 percent of our gross national product. For the same year the active force was comprised of 2,159,511 soldiers, sailors, marines and airmen. An additional 1,178,028 civilians were employed by the various armed services.

Our military forces are posted to bases and are afloat pursuant to a worldwide assignment strategy. Nearly 19,000 serve in Central America and the Caribbean basin; 19,000 are posted to Africa, the near east and South Asia; and another 130,000 are stationed in east Asia and the Pacific. Three hundred forty-nine thousand are assigned to billets in western and southern Europe. Finally, over 1,646,000 are stationed in the United States and U. S. territories.

It is remarkable, given the size and geographical dispersion of our military, that education and training constitutes an ongoing and vital aspect of the work programs of the armed services. The Defense Department speaks in terms of "training loads." That is the average number of students and trainees participating in formal individual training and education courses during a particular fiscal year. The training loads are then expressed in terms of equivalent student/trainee man years. During the fiscal year 1985 a training load of 234,000 was the aggregated participation for the total Defense Department. Thus, in a single year hundreds of thousands of military personnel were involved in formal individualized training encompassive skill development in the following area: recruit, officer acquisition, specialized skill, flight, professional development and one-station unit training.

Shelborne has called our military organization the "largest adult education system in the world" (Shelborne, 1965). In each of the services, daily activities revolve almost totally around

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training of one type or another: individual training, unit training and mission training. This focus on educational and training is central to the career of each individual service member throughout the term of his service commitment.

Recognizing the enormity of the American defense program and more specifically the extraordinary scope of the training and education activities, let us sharpen our focus to a single armed service, the U. S. Army, and a single aspect of the Army's education enterprise, collegiate education programs. In directing attention to Army activities, note should be made of the many highly successful collegiate programs offered by the Air Force--particularly the Community College of the Air Force and the Navy with its shipboard and SOCNAV programs.

Education in the U. S. Army

Historically, a very high value has been placed on education by the Army. This has been the case since 1941 when the Army Institute was organized to offer postsecondary level education to those serving during World War II. Two years later the Army Institute was redesignated as the United States Armed Forces Institute (USAFI) and opened to all service personnel. Course offerings of the Institute were available through correspondence from cooperating colleges and universities (Watt, 1987).

These early educational opportunities were aimed at the soldier as a member of the general society and were not in response to a particular military requirement. By the early seventies, resident college programs at the associate, baccalaureate and graduate levels were available on nearly every Army installation.

Moreover, collegiate education has been strongly and constantly stressed by the Army as an aspect of the professional development of the non-commissioned, warrant and commissioned officer corps. Collegiate educational attainment is viewed as an important criterion in decisions relating to assignments and promotions. For senior NCO's and warrant officers the attainment of an associate's degree has been established as a goal. Commissioned officers must hold a baccalaureate degree and are strongly encouraged to pursue graduate study. A recent official Army training publication calls attention to this mandate by specifically stating "military education and training are not limited to courses conducted in the Army school system . . . advanced specialty education may consist of pursuit of graduate degrees at recognized civilian colleges and universities." (Army pamphlet, 600-3, p. 11).

Army officials have also seen collegiate educational programs as essential to their recruitment and retention efforts and to the desire to bring more high mental classification recruits into the Army. John O. Marsh, Jr., Secretary of the Army, has made the point directly, "education programs support total Army goals by laying a foundation of skills and values fundamental to military learning. Reaching for excellence through Army education will strengthen our ability to recruit and retain quality soldiers . . . that is, a highly motivated soldier who makes the biggest contribution to the Army, and pursues advanced education both in military professional development courses and in the colleges classroom off duty." (Army Times, 1986).

Composition and Deployment of Army Forces

Before examining the unique nature of the military learner and the adjustments necessary for a collegiate institution to effectively serve this clientele, a brief understanding of the composition and deployment of Army personnel may be helpful. As of March 31, 1986, the total active strength of the Army numbered 777,181 with a breakdown of 109,013 officers and 668,168 enlisted. This force represented 14 percent of the total Department of Defense strength. Five hundred and eighteen thousand Army personnel were stationed in bases across the United States; another 218,000 were posted to western and southern Europe with principal deployment in the Federated Republic of Germany and West Berlin. Another major concentration of soldiers numbering nearly 35,000 were stationed in the Republic of Korea and other east Asian and Pacific locations. The remaining 10,000 were assigned to hundreds of posts around the globe (Department of Defense, 1987).

Table 1

Age Distribution of Active Duty U. S. Army Personnel for 1987

Age	Officer	Enlisted
20 - younger	26	155,747
21 - 25	18,019	241,446
26 - 30	27,056	128,659
31 - 35	23,732	73,942
36 - 40	22,338	46,824
41 - 45	11,372	14,521
46 - 50	5,019	3,443
Over 50	1,749	439
Total	109,311	665,021

Table 2

Educational Attainment of
U. S. Army Personnel, 1987

Educational Level	Officers	Enlisted
No High School Diploma or GED	-0-	62,551
High School Graduated or GED	-0-	1,441,295
Below Baccalaureate	21,090	279,948
Baccalaureate Only	172,951	40,060
Advanced Degree	102,555	2,415
Not Reported	11,856	2,878
Total	308,452	1,829,147

Table 1 provides an overview of the age distribution among Army personnel. Examination of these data illustrates the strong concentration of soldiers in the 20-to-45-year-old classifications.

For fiscal year 1987 over 91 percent of the accessions of non-prior service personnel into the Army were high school graduates. Table 2 provides a more complete analysis of the educational attainment of active duty officer and enlisted personnel. It is valuable to note that 7 percent of the Officer Corps do not hold baccalaureate degrees whereas 87 percent of the enlisted personnel have not participated in collegiate studies.

Thirty-seven percent of the enlisted and 13.8 percent of the officer personnel are minorities. Ten percent of the enlisted and a similar percentage of the officer personnel are female. Fifty-three percent of the Army's active duty personnel are married.

U. S. Army's Commitment to Collegiate Education

Against this demographic backdrop, the Army in late 1986 announced an ambitious campaign to involve soldiers in collegiate education programs. Then Army Chief-of-Staff General John Wicham proposed an effort "to have 9 out of every 10 soldiers involved in an Army education program by 1990." The participation rate at that time was 5 in 10 (Army Times, 1986).

Army officials have been willing to lend strong fiscal support to the effort through its generous tuition assistance program. Under this system soldiers may participate in off-duty college classes with the Army paying 75 percent of tuition costs for all personnel. For enlisted ranks of E-5 and above with fewer than 14 years of service, the Army will support 90 percent of the tuition costs.

Table 3

U. S. Army Tuition Assistance
Expenditures by Fiscal Year 1980-87

Year	Expenditures
1980	$12,600,000
1984	21,800,000
1985	24,300,000
1986	27,000,000
1987	30,000,000

The success of the Army's efforts is dramatically illustrated by expenditures for tuition assistance. Table 3 traces the stream of expenditures which have risen from $12.6 million in FY 1980 to $30 million in 1987.

Participation rates have parallel expenditure trends. For fiscal year 1987, 167,960 soldiers enrolled in 218,653 college courses with tuition assistance.

Delivering Collegiate Education Services to the Military

Collegiate educational programs available to off-duty soldiers are today almost universally delivered under aegis of the Servicemen Opportunity Colleges (SOC). SOC is an organization of the principal national higher education agencies, the Department of Defense and the military services. SOC was founded in 1972 with the goal of adapting traditional collegiate educational programs to the field training deployment and duty schedules of soldiers.

Colleges and universities seeking institutional membership with SOC are required to conform to a series of principles, criteria and operating guidelines which seek to employ educational strategies which have been judged successful in meeting the needs of service members. The organization's member institutions actively seek to protect and to assure the quality and integrity of educational programs. Currently, 485 colleges and universities are members of SOC.

It is from the collective experience of the SOC-affiliated institutions operating on military stations across the globe and delivering college programs to active duty soldiers that a pattern of successful practice emerges.

Clear recognition and certification must be given to the broad variety of educational populations and experience held by service members. Admissions practices which have been developed primarily for recent high school graduates frequently work to the detriment of a soldier who may otherwise be qualified for college-level work. Specialized training and experience gained through Army schools may in fact well qualify soldiers for college admissions. In order to effectively facilitate the admissions of soldiers, institutions must do the following. First, recognize the GED high school equivalent certificate utilizing the American Council of Education recommendations. The most recent data indicate that over 22,000 soldiers do not have high school diplomas or GED certification. The Army currently has in place a tuition-free program for high school completion for the 10 percent or 13,000 non-high school graduates recruited each year. Second, enrolling institutions must accept credit for previously completed postsecondary study and recognize non-traditional sources of credit as recommended by the American Council of Education: military occupation specialty experience, formal military schools and CLEP tests.

The readiness of the military learner to successfully complete collegiate work should be addressed by institutions serving this clientele. For example, the State of Tennessee has recently implemented a state-wide testing program for all entering first-time college student scoring less than 16 on their ACT entrance examination. Results from this testing indicates that over 94 percent of the black freshmen and 75 percent of the white freshmen entering the state's community college program require remedial/development assistance. Data collected in one of the Tennessee regional universities serving a large military population indicate that the percentage of soldiers requiring academic assistance exceed those of the general population.

Class schedules for collegiate work should be structured to accommodate the erratic training, assignment and transfer life style of the military learner. Successful programs are typically offered on weekday evenings, during lunch hours and on weekend afternoons. Just as course times are set to meet the active duty soldier's schedule, so is the length of the academic term. Many successful institutions provide intensive six and eight week terms that involve concentrated study in a single discipline. Faculty and staff recognize that absenteeism is sometimes necessary so service members can meet duty commitments.

Frequent transfers and the generally high level of mobility have made it extremely unlikely that soldiers participating in collegiate studies would be able to complete their degree programs at a single institution. Consequently, colleges serving an Army clientele must adapt their degree credit transfer practices for service members to minimize loss of credit, avoid duplication of course work and ease residency requirements, while concurrently maintaining high standards of academic quality for their programs.

Taken together these characteristics of the military student--atypical admission qualification, readiness for collegiate study, mobility, erratic work schedules and crediting extra institutional learning--constitute the range of serious problems confronting institutions serving soldiers.

Effective solutions to these problems have been achieved through a network of institutions participating in the Servicemember Associate Degree (SOCAD) and the Bachelors Degree for Soldiers (BDFS). Both of these programs have been jointly sponsored and developed by the Army and Servicemembers Opportunity College with 77 cooperating institutions of higher education participating with the SOCAD network and 53 institutional affiliates of BDFS.

These programs operate as follows. A soldier enrolls with a SOCAD or BDFS institution where appropriate admissions counseling and evaluation of previous degree credit, military schools, military occupational specialty and other experiential learning takes place. Following this procedure the soldier selects the degree program best suited to individual professional personal aspirations. Currently, 20 associate degree and 17 bachelor degree programs are available and offered at sites throughout the Army. At this juncture the soldier signs a contract with the institution for the desired educational program.

This contract provides for a matrix of courses which are transferable among all of the participating institutions offering the particular degree program. Moreover, the contract guarantees the student that the degree will be conferred by the institution regardless of where the course credits were completed. This arrangement insures the soldier can complete the degree.

The success of the program is remarkable. Currently over 40,000 student contracts are in active status and, since the institution of the program in 1983, in excess of 7,500 degrees have been awarded.

Institutions of higher education currently serve nearly 170,000 soldiers on 226 Army bases in the United States, Europe and Latin America. Each participating soldier because of educational background, career aspirations, family obligations, training schedules and mobility constitutes a unique non-traditional learner. That colleges and universities have served this clientele effectively while maintaining high academic standards is a remarkable achievement. Certainly other institutions working with other adult non-traditional learners could gain much from an examination of how the needs of the military student are being met.

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CERTIFICATE PROGRAMS FOR CONTINUING EDUCATION

Mark Salmon

This paper will discuss practical issues in the development of certificate programs for adult students offered through the continuing education divisions of colleges and Universities. Certificate programs are intended to provide occupational training for those students who have had at least some college background. These programs should be practical, goal oriented, and market directed. Those who undertake to develop such programs must consider a number of important factors: the educational needs and characteristics of adult learners, the service orientation of a certificate program, the labor needs of prospective employers, the internal and external context of the educational institution, program planning and development, faculty recruiting and development, program marketing, and program cohesion. General issues for a model of certificate-program development will be presented.

Occupational Training for Adult Students

Consider the following scenarios: Ted majored in business administration as an undergraduate and while he never really liked school much, he stuck it out and got his B.S. degree. He has been working in a bank for four years but has concerns about his prospects for advancement. His bachelor degree, it seems, is a limiting factor in a job area where a graduate-level education in business is regarded as a prerequisite for significant career mobility. Besides, he never really liked the work he was doing. Barbara spent two years in college and then got the acting bug. She moved to New York, had a few walk-on roles in soap operas and did a few local TV ads but never hit the "big time." She now works as a secretary in an architectural firm. Carrie majored in psychology and spent a year studying social work in graduate school. She became disenchanted and left the program. After five different jobs in seven years, she still has not found a viable career path.

The problem for each of these individuals is the same. They are competent, motivated and have good interpersonal skills, but they lack job-market training with career potential. Nor are their stories unique. Many individuals find that a college education is inadequate to prepare them for the competitive demands of the job market. They need additional career training, but for a variety of reasons may find it difficult either to finish their undergraduate education or move on to graduate training.

How can their educational needs be met? One answer that is being offered by a growing number of continuing education divisions in colleges and universities is the certificate

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program. A certificate program is a balanced and integrated course of study designed to provide students with an introduction to the fundamentals of a particular occupational field. A certificate program might consist of as few as 6 to as many as 15 or more credit courses and would cover a broad range of technical, theoretical and professional issues. The kinds of areas appropriate for certificate-program study would include those that are essentially "professional" in nature yet which are not regulated by licensing requirements that necessitate a college degree. Well designed programs would be tailored to the occupational and professional conditions of a local or regional job market. Examples might include: interior design, advertising, public relations, insurance, etc. Admissions requirements that include a minimum of two years or more of college background can be built into the program. In addition, a minimum grade average might be required for admission to or successful completion of the program.

These programs serve the needs of both adult learners and prospective employers. For students with at least some college background, a certificate program can provide an opportunity to receive college-level occupational training specifically aimed at a local or regional job market. For prospective employers with particular educational requirements for entry-level professional positions, a certificate program can provide mature employment-experienced job candidates with recent occupationally specific college-level training. In the final analysis, the certificate program is a service program and it will only be as successful as it is useful to both students and employers.

Institutional and Community Contexts

Several important conditions must be present in order to help insure the success of a new certificate program. First, conditions within the educational institution must be favorable for program planning and development. The importance of an entrepreneurial climate that stimulates and encourages new ideas and initiatives cannot be overemphasized. Institutional leadership must be supportive of the *idea* of certificate education, committed to program development *over time* and willing to provide the full range of *resources* necessary for a start-up program. The organizational structure of an institution should allow a level of decentralized autonomy sufficient to foster program-level responsibility for a full range of requirements that include program design, curricular development, faculty recruiting, marketing and budgetary issues. Decentralized autonomy is necessary because a start-up program may require rapid adjustments during its early stages. All of these requirements presuppose the presence of other important institutional conditions including the time, space, facilities, staff, organization, and procedures necessary to integrate a certificate program into a continuing education division or unit.

Second, for a certificate program to work, conditions within the community must also be right. There must be a substantial employment market within a particular and clearly defined occupational category. A certificate program must respond to the technical and professional needs of an occupational field within a city or region. It is also important to gage the economy in general on a local, regional and even national level at the beginning of the program planning effort. The health of the economy will affect not only the availability of entry-level job openings in many fields but also individuals' perception of the value of occupational training at a particular point in time. This kind of program will have the best chance for success where there is a sufficient and demographically correct population base from which to attract students. There must also be an adequate number of local institutions in an occupational field from which accomplished professionals might be drawn to serve as curriculum advisors, faculty member, benefactors and friends of the program. Finally, any professional associations or affiliated groups representing the interests of an occupational field can also serve as valuable contributors to a certificate program.

Program Planning and Development

Program planning and development do not necessarily require detailed knowledge of the practice of an occupational field. The essential task of the program organizer is to *organize* and that requires careful planning and preparation. An individual who does not have detailed knowledge of the field can undertake sufficient research to organize the course-by-course requirements of a curriculum. Research data can be obtained from several sources. Guidelines can drawn from existing certificate programs at other institutions, from degree programs on the undergraduate or graduate level, from insights provided by working professionals in the field and from representatives of professional associations or affiliated groups. Accomplished professionals will have first hand knowledge of current occupational requirements of entry level positions. These Individuals should be organized into a curriculum advisory board. Ideally, they would *not* serve in a teaching capacity. It is important to separate curriculum decision making from teaching because the potential for program adjustments might necessitate changes in the curriculum and therefore changes in teaching assignments.

The aim of a certificate program should be to provide an introduction to the fundamentals of a field. It should equip individuals with what they need to know to make an entry level contribution in a field and also with what they need to know to be effective on-the-job-learners. Most professions are characterized by a division of labor and a fairly high degree of specialization. It is also true, however, that a professional field is united by basic techniques, skills, knowledge and a code of ethics. A sufficient number of courses should be organized to provide an introduction to these basics.

It is hard to translate those curriculum fundamentals into an ideal number of courses. Each field will have its own requirements. There is another consideration, however, that affects the number of courses in a program. Adult students would typically work during the day and take courses at night. It would therefore be difficult for them to take more than two courses a semester plus one or two course during the summer. That means a continuing education student enrolled in a certificate program could take no more than 5 or 6 courses per year. Since the aim of a certificate program is provide streamlined career training for adult learners, the length of a program is a central consideration. At a rate of 5 course a year, a 10 course program would take two years and a 15 course program would take three years. A program that lasts more than three years may be too long.

Marketing and Financing the Program

The certificate program *itself* and what it represents constitute the center piece of the effort to market the program. Students with serious career concerns are not always interested in taking a few random courses, even if they are in an occupational field. The certificate program allows adult students to go beyond the typical structure of continuing education by involving them in an organized program with clearly demarcated parameters. The program is finite and moves through a sequence and progresses to an end point. It is goal oriented with career training as the process and employment opportunities as the initial outcome. The ultimate marketing value of the certificate program is therefore what it represents: a balanced and integrated course of professional training consciously created to provide individuals with specific career-related knowledge and training. That fact needs to be stressed to those individuals who inquire about the program.

Having a clear conception of the value of the program and understanding the importance of conveying that to prospective students is one thing. Bringing the program to the *attention* of students is another. I have found three marketing strategies that are economical and that work. The first is to simply include the certificate program in the continuing education catalogue. The public will already be inclined to turn to the continuing education division for adult learning opportunities. The second is to purchase local or regional mailing lists and to send promotional material about the program to individuals through the mail. Local or regional mailing lists from popular magazines are especially useful because they are organized along fairly distinct demographic lines. Look at several magazines to try to get a feel for the kind of individual who might typically read that publication. This becomes an interesting case in applied sociology. Third, the best marketing force in the long run is word of mouth. It may take time to develop but if the program is good, people will learn about it.

The next critical phase of marketing occurs when individuals make inquiries about the program. It is at this point that the hard work of program planning pays off. The better the certificate program is the easier it will be to convey a sense of pride, confidence and enthusiasm about the program to the prospective student. Imparting that attitude to students is a critical function of the program organizer. It is important for marketing the program, but more importantly it helps set the affective tone with which the enrolled student should approach the program. Students who feel good about the program will make a greater investment in their own efforts. I will return to this important point in the next section.

Financing and budgetary considerations are closely linked to marketing in at least five important ways. First, unless the program receives independent funding, it must at least cover its own expenses to survive. A start-up program is a risk that requires capital investment much of which will involve marketing costs. The program must thus be marketed aggressively to insure an adequate enrollment but at the same time prudently to hold down costs. Second, the total cost of the program to students must appear to them to be affordable. They clearly understand the concept of short-term investment for long-term gain, but their short-term resources are limited. Students want to know how much the entire program will cost them. Thus, the price of the program is an important aspect of marketing the program. Program courses should generally follow the cost of other continuing education courses in a particular college or university. Third, the certificate program may very well face local competition from other schools. When it does, students will compare program costs between institutions. Cost becomes a marketing issue on this level as well. This, of course, is part of a larger issue that is related to the entire price structure of continuing education courses in general. Fourth, marketing costs must be seen in context of the program *over time* not simply in terms of a semester-by-semester expense. That means that if the marketing costs that bring students into the program are covered by their tuition during the first semester, their tuition from subsequent semesters will function as revenue. In short, a program only has to pay marketing expenses *once* for the involvement of a student in the program over several semesters. The same principle applies to marketing at the undergraduate level. Fifth, to the extent that the certificate program attracts students who are new to the school, the program has broader marketing as well as public relations implications for the continuing education division and the school in general.

Building a Cohesive Program

Continuing education students typically feel detached from the mainstream of college life. And for good reason--they *are* detached! Classes are held at night, instructors are often adjunct faculty and non-degree courses are not meaningfully related to any integrated whole. Continuing education students are not homogeneous and it would be a mistake attribute to them common characteristics and common needs. Experience suggests, however, that many students take advantage of opportunities for greater institutional participation and involvement.

There are several possibilities for building a cohesive program for students. The starting point, again, is the program itself. The program is an organizational entity within the context of the institution. Membership is based on acceptance into the program and admissions standards and procedures can increase the perceived value of program involvement. Registration should be handled through some process that separates the program organizer from the structures and procedures by which other students enroll in the other courses offered through the continuing education division. Acceptance into the certificate program should include an interview, submission of college transcripts and a resume in order to asses the background, strengths and experiences, and interests of adult learners.

The admissions interview is an opportunity to integrate the new student into the program. An important function of leadership is to integrate organizational members by defining situations, conveying meanings and establishing attitudes. The observations made earlier about the importance of imparting a sense of confidence, pride and enthusiasm about the program to prospective students must be repeated at this point. The admissions interview is a critical opportunity to make students feel good about the program and thus feel good about their involvement in it. Every subsequent contact with students should also convey a positive attitude. The importance of this for building a cohesive certificate program can not be overemphasized.

There are other ways to increase feelings of membership and belonging on the part of certificate program students. End-of-the-semester parties are relatively inexpensive and easy to organize yet tremendously useful from this point of view, especially if both students and faculty are included. As social rituals, parties confirm and reinforce feelings of membership and belonging. Another useful device, where appropriate, is to bring classes of students together to work on common projects or to share an educational experience. Enabling classes to interact can build feelings of community. Other possibilities include organizing a newsletter, guest lectures, resume and counseling services, etc.

Finally, efforts to build a cohesive program should include an integrated faculty. Continuing education instructors often feel as detached from the college community as continuing education students. Efforts should be undertaken through a variety of means to insure a greater feeling of membership, participation and belonging on the part of certificate program faculty. A sense of involvement might thus be conveyed to students in the classroom by involved and committed faculty.

Conclusion

Certificate programs are a relatively undeveloped area with tremendous growth potential for continuing education. They address the educational needs of students seeking career training as well as the labor needs of prospective employers. These programs should not be seen as a substitute for undergraduate or graduate degree education. Rather, they should be understood as a structured educational supplement for those students who for one reason or another are not likely to continue their education in a degree program.

The programs as I have described them are increasing in number but are not yet common. Efforts should be made to increase program development, evaluation and research in this innovative area.

A PROGRAM FOR COLLEGE-AGE LEARNING DISABLED: A COOPERATIVE MODEL

DR. MARGARET NAN TURNER

Much has been written concerning the involvement of the Special Education faculty in the education of the college LD student (Shaw & Norlander, 1986, Salend, Salend & Yanok, 1985). The limitations for a small 4-year liberal arts college are obvious. Many of these institutions do not have a Special Education program and as a result no special education faculty. However, these institutions are often the ones chosen by the LD secondary student. The size, the quietness of a rural campus, allow for fewer distractions and the added advantage of individual attention because of smaller classes.

In a survey by White, Alley, Deshler, Shumaker, Warner & Clarke (1982), 67% of young adults diagnosed as learning disabled planned to continue their education in a post-secondary setting. As a result inquiries concerning special services at colleges and universities are increasing. Davis & Elkins College, a small (approximately 900 students) liberal arts college, recognized the need to provide these special services. Without a Special Education faculty to provide these services, a cooperative model utilizing exisiting personnel was developed. A full-time Director of Learning Disabilities was hired to develop and coordinate the model. The Director acts as an agent for change in both administrative and faculty attitudes and coordinates the service delivery for the LD population (Rosenthal, 1986).

Program Development

The LD support services at Davis & Elkins college were started during the summer of 1987. A Program Developmental Time Line was established along with program objectives and evaluation procedures.

Insert Figure 1 about here

Program objectives included the development of the following:

1. To develop a psychoeducational report format.
2. To establish a multidisiplinary team consisting of the academic dean, resource center director, faculty member, counselor, and LD Director.
3. To develop a network of support services.
4. To develop informational/training procedures for faculty members.
5. To establish contacts with other institutions providing services for the LD population.

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Elkins, West Virginia

6. To develop admission criteria/standards and appropriate forms.
7. To disseminate information to other institutions.
8. To develop a list of available materials and current research on program options.

Cooperative Model Components

The cooperative model has been broken down into four components. A graphic outline of the model is presented in Figure 2. Part I consists of Admission and Assessment.

Insert Figure 2 about here.

Students requesting Learning Disabilities services must submit the following before eligibility is determined.

1. High School transcript
2. Results of psychological testing completed within the past three years indicating the results of both ability and achievement.
3. Recommendation of an LD teacher, counselor, or psychologist.
4. Descriptiong of the Specific Learning Disability and/or a copy of a recent IEP and list of modification procedures which might be necessary.
5. A handwritten essay by the student requesting services indicating why services are being requested and what the student expects to achieve.

The following is highly recommended but not required.

6. A personal interview with the LD specialist.
7. Participation in the Summer Institute.

All applications are screened by the LD Director and the admission committee. If further testing is required arrangements are made with the college counseling department or with the student's secondary school. The admission counselors have been provided with a handbook, containing selected admission forms and have attended a brief training session to aid them in their recognition of potentially successful LD students.

Component II, orientation, has three distinct parts occuring prior to the fall semester. Faculty orientation includes a staff development workshop. This workshop may include films, slide-tape presentations, guest speakers, open forum, readings, phamplets (Vogel, 1982). This workshop answers three basic questions: What are the characteristics of the LD college student? What can be done to help these students? and, How do these students fit into the college setting? (Cordoni, 1982). Many instructors are concerned about the lowering of standards and the additional time required in the instruction of the LD college student (Mangrum & Strichart, 1984). They need to be reassured that they will need to do only a few things differently for their LD students and that the majority of the work with these students will rest with the LD Director. It is important to note that information is sent out to the faculty periodically throughout the year not just during the pre-semester workshop. Private intensive sessions are held with individual faculty members who will be working directly with the LD students.

The LD student also goes through an orientation process. The students are advised to attend a Summer Institute prior to their first semester. The Summer Institute consists of two-weeks in which various faculty members are available to instruct the students in fundamental math, reading and writing skills. During this summer session the LD students have daily sessions with the LD Director. These sessions may include further assessment, strategy training in the areas of taking notes, time management, test taking, etc. depending on the individually diagnosed needs of the student. The Summer Institute is open to all incoming freshman so the LD student also forms social contacts. At this time the student can be observed in a social situation to assess any problems which might occur during the regular semester.

During the first week of the semester all LD students are required to attend three, one hour evening sessions. At this time scheduling problems, dorm problems, initial classroom problems are discussed. Time-mangement plans are formed and a schedule for meeting individually with the LD specialist is made. These meetings also provide an initial support system for the students during the first difficult weeks of college life.

Component III concerns the advising and placement/registration of the accepted LD student. All freshmen are assigned a faculty member as their advisor. The LD students are also assigned a faculty member who is then briefed by the LD Director on the strengths and weaknesses of the student which might effect class assignments. LD students are allowed to take only 12 semester hours for the first semester. There are three foundation courses in reading, writing and math which may be recommended depending on test results. LD students may pre-register along with other students who choose to do so.

The Fourth Component of the cooperative model consists of five on-going parts. These various support services are delivered by several different departments already in place at the college. Again all personnel in these departments have been briefed as to the specific needs of the LD college student.

Insert Figure #3 about here

The support services offered by the various departments include:

1. Evaluation of skill needs
2. Reading and writing skill remediation
3. Instruction in word processing (computer usage)
4. Library skills
5. Test-taking strategies/modification arrangements
6. Academic advisement
7. Peer-tutoring in the content areas
8. Learning strategies instruction
9. Career/vocational counseling
10. Personal counseling

The Director of Learning Disability Services for the college-age LD student at a small school must become an agent for change in both the administration and faculty attitudes (Rosenthal, 1986). The service delivery for the LD population is coordinated by the director utilizing the resources available at a small college. With the increasing number of LD students being encouraged to consider college and the obvious lure of a small college enviornment, these schools must be prepared to meet the needs of these students without the assistance of a special education faculty.

Figure I. Time line of program development.

Program Objectives	Evaluation Procedures	Date
Psychoeducational report format	review eval. procedures and various formats	Aug. 1987
establish multi-displinary team	establish monthly meeting	Oct. 1987
create a network of support services	establish meeting schedule	Nov. 1987
Inform/train faculty	record faculty contacts	Jan. 1988
contact other LD colleges	review records of contact at other institutions	Jan. 1988
revise admission standards	work with admission counselors and provide a working handbook	Feb. 1988
disseminate info.	attendance at national and state meetings.	Jan. 1988

Figure 2. Cooperative program model.

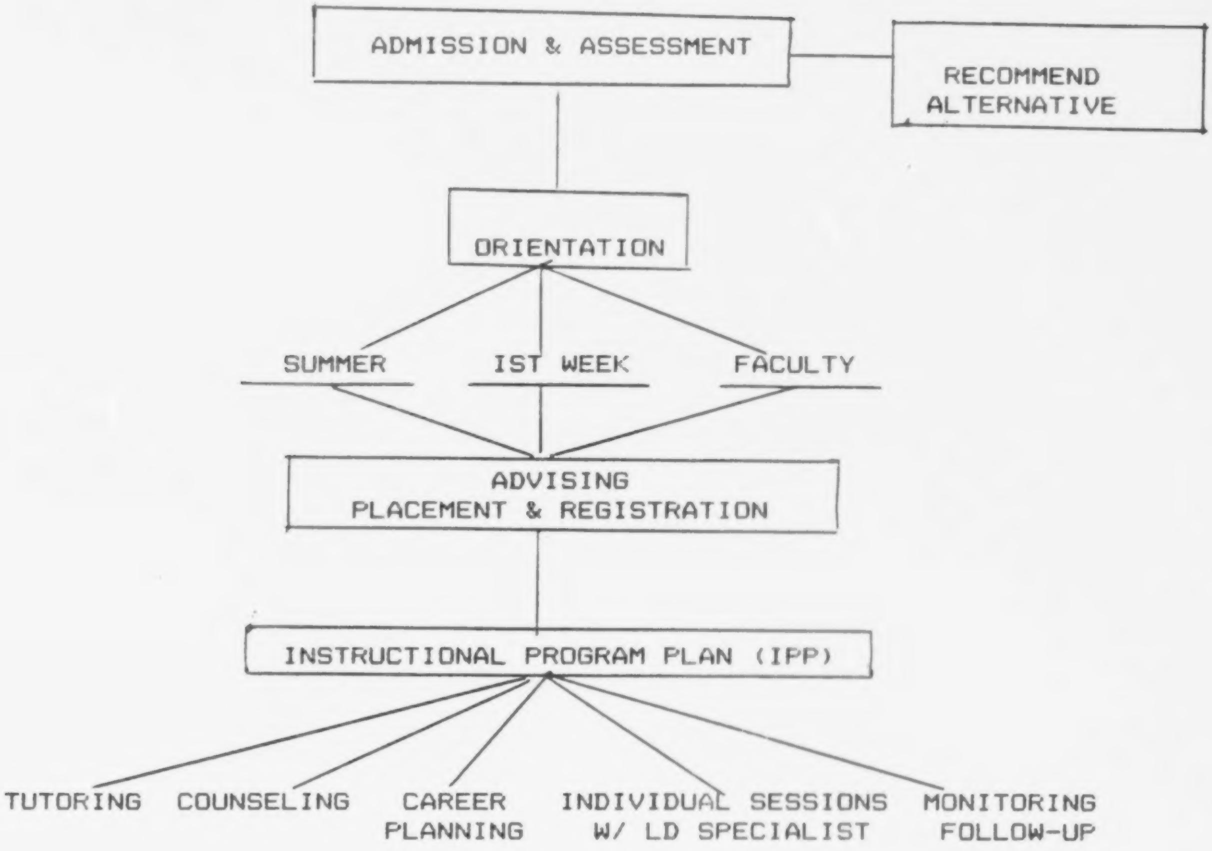
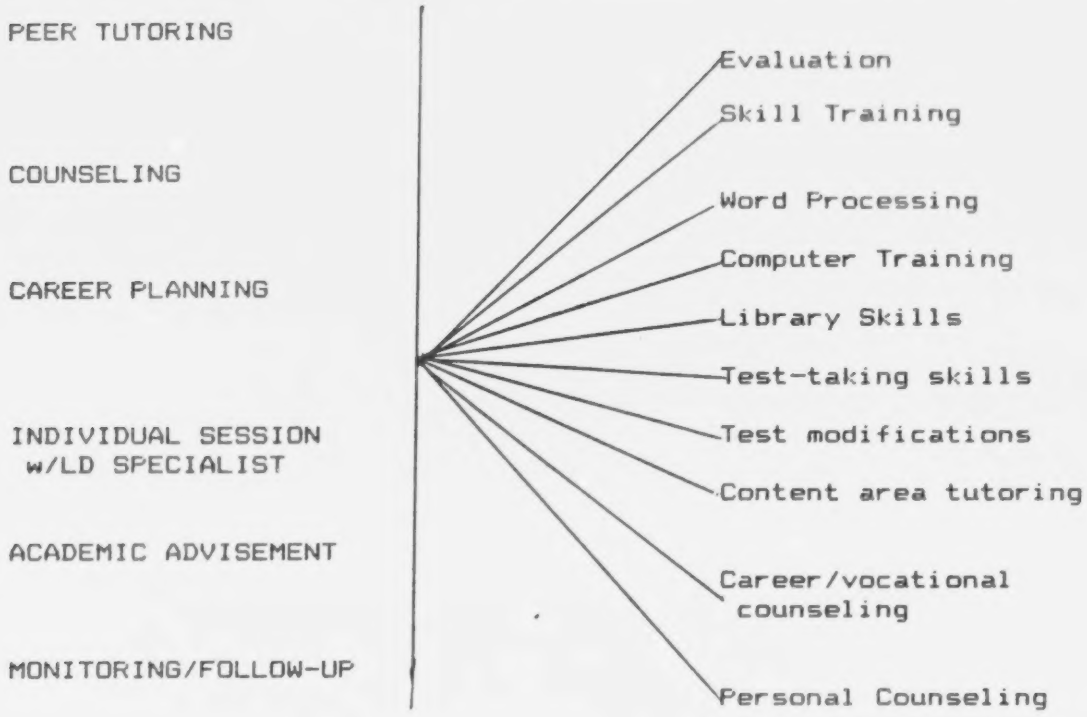

ADMISSION & ASSESSMENT
RECOMMEND ALTERNATIVE
ORIENTATION
SUMMER
IST WEEK
FACULTY
ADVISING PLACEMENT & REGISTRATION
INSTRUCTIONAL PROGRAM PLAN (IPP)
TUTORING
COUNSELING
CAREER PLANNING
INDIVIDUAL SESSIONS W/ LD SPECIALIST
MONITORING FOLLOW-UP

Figure 3. Support Services


PEER TUTORING
COUNSELING
CAREER PLANNING
INDIVIDUAL SESSION w/LD SPECIALIST
ACADEMIC ADVISEMENT
MONITORING/FOLLOW-UP
Evaluation
Skill Training
Word Processing
Computer Training
Library Skills
Test-taking skills
Test modifications
Content area tutoring
Career/vocational counseling
Personal Counseling

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The Educational Planning Process: A Blueprint for Success

by

Sharon L. Bolton

If we were to draw a portrait of the idealized student approaching graduation, we obviously would include competence in a chosen field. However, we would also include competencies such as realistic self-knowledge and confidence, knowledge of the university system and the ability to work with and within it, a clear sense of direction and the ability to make self-congruent decisions, and most importantly, the ability to build an academic plan that reflects these competencies in the development of life, career, and academic goals.

A crucial first step towards achieving the idealized graduate would be to create a program for incoming students in which students begin to take responsibility for their academic program and understand how this impacts the quality of their life. Too often, students come to the university with a sense that some great external force has control over their lives. Without a sense of self-control and self-direction, the student will tend to drift through the system as best they can, always placing the onus for success or failure at another's doorstep. This is particularly true of those students who have not experienced academic success in the past.

Self-direction, self-confidence, the ability to plan and make academic decisions and the ability to significantly control the quality of one's life are not vague, esoteric goals, but are skills that can be taught and learned. Clearly, these are critical skills that not only ensure academic success, but are of significant value in the "empowerment" of students. Teaching these skills must be one of the goals of any college or university which has made a commitment to reaching the non-traditional student.

The Career and Interdisciplinary Studies (CIS) Division of the School of Education and Human Development at the State University of New York at Binghamton has developed a course to assure that all in-coming students are given the opportunity to learn the skills that will move them toward being that idealized graduate. Introduction to Career and Interdisciplinary Studies (C.I.S. 200), is a one credit, required course for in-coming students. The primary goal of the course is to help students articulate their reasons for being in college and to plan an academic program that reflects their life and career goals. A secondary goal is to provide information to students about the various resources available to them at the university and how to access these resources.

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We are currently in the second semester of offering the course. The first semester the class consisted of 125 students in one section. This semester we have approximately sixty students divided between two sections to ensure more individualized attention.

The course is structured as a collaborative, interactive helping process conducted by individuals within the university with the skills, interests, training and personal characteristics to assist students in resolving educational and career related concerns. The faculty person acts as a coordinator rather than a teacher. It is most important for the coordinator of the course and the session leaders to provide mature, experienced opinions in many aspects of the planning. They must act as sounding boards for ideas as the students progress through each step of the process. It is important to create an open, friendly climate so that students feel free to share ideas and dreams. Students need to feel that someone has a personal interest in their present struggles and their future. The course meets for eight sessions of 1 1/2 hours. A course manual was developed by CIS Staff and includes the information and exercises. The course grade is based on attendance, homework (which includes a series of exercises that identify values and examine careers, and Educational Goal Statement and an Educational Plan of Study.

Educational planning in the C.I.S. 200 course involves many important tasks that eventually incorporate a set of short-and long-term goals. Goal setting involves imagining a desirable future while developing present plans. Setting goals is a very difficult task for some students and most times they find it easier to formulate what they perceive to be an effective Educational Plan of Study without considering goals or they express their goals in very vague and general terms. We have found that goals are sometimes identified by students as they make and act out certain decisions. Planning these future goals do not make them concrete, but provides a framework for students to think about them and perhaps the student will then move toward a specific goal. Before we begin the Educational Plan of Study, we help students questions their values and describe what is implicity important to them in making certain decisions. Students tend to make decisions based on previous knowledge, experiences, and prior choices. Only after making an implicit choice can they confirm it on the basis of hard fact. Although goal-directed planning is viewed as desirable by most, we stress the need for flexibility and adaptability as being critical as the goal is being pursued. The characteristics of a good educational plan are that it is personally relevant and realistically based on the student's interests and strenghts, attainable within a reasonable timeframe and structured so that changes or modifications may be made when needed or desired without disrupting the entire plan. A good plan will present an academic chaallenge to the student while providing a practical perspective for the career-related concerns that many students have.

As students move through the process of looking at their life and career goals, they need to understand how academic and career goals merge. Although the decisions about an occupational field may seem to many students to be the most critical decision made in college, it is in reality only one of many. Being a college graduate implies knowledge, abilities, skills, and a much broader capability to contribute in many career areas. The Educational Goald Statement required of students addresses these concerns as well as their ability to articulate their reasons for being in college and how the degree fits into their career and life goals.

One of the on-going decisions needing to be made throughout college is the choice of courses to schedule each semester. Many students see these as relating only to the major they have selected. Students need to be taught the scheduling process, the value of course exploration, and the important use of electives. An integral part of creating an Educational

Plan of Study includes a projection of all courses to be taken. We ask students to provide a rationale for why they are taking certain courses and make sure they understand how the integrated whole works together. Students need to learn the art of building a schedule and how to select courses that provide balance and diversity. The Educational Plan of Study required of students is a two year projection of courses based on their academic standing, and their life and career goals. Creating appropriate and realistic schedules can have a great effect on students' success or failure, especially during their first year in college.

We have found that certain conditions must be present before an educational plan can be of optimal value:

1. Students need a personal commitment and involvement in formulating a plan. If the plan is initiated by them and has relevance for them it will provide a blueprint for an important period in their lives and have profound influence on their future. They will also take responsibility for its outcomes.

2. Students must be aware of the need for flexibility in carrying out any plan. Nothing remains static, and plans may need to be altered as new information or events indicate a change is desirable or necessary.

3. Students should be able to articulate their reasons for being in college and how the degree fits into their career and life goals.

The C.I.S. Division, in developing the C.I.S. 200 course, has taken the first step in producing the idealized graduate. The course is essential for creating a blueprint as a guide to building an individualized plan that brings focus and meaning to the educational experience. It provides a mechanism for on-going academic advising and planning throughout the student's degree program. The course is important for the "empowerment" of students; only with knowledge, skills, and confidence can students effectively take control of their lives and make effective decisions.

THE EDUCATIONAL PLANNING PROCESS

C.I.S. 200: Introduction to Career and Interdisciplinary Studies
Course Manual

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THE GOODRICH SCHOLARSHIP PROGRAM
A RETENTION MODEL FOR LOW-INCOME STUDENTS

INTRODUCTION

Economically disadvantaged college students are a high-risk group in terms of attrition in today's colleges and universities. Financially, they must meet the demands of ever-increasing tuition and fee rates. Academically, they must meet the required standards in order to gain admittance and must maintain a level of required competency with regard to cumulative grade point averages. Personally, they need to establish and maintain ongoing communications with other students, as well as with faculty and staff, in order to acclimate themselves and thrive in an otherwise intimidating setting. With such demands placed on the low-income student, the likelihood of student dropout becomes more of a possibility.

The University of Nebraska at Omaha, like many of today's colleges, is confronted with the severity of this student population. With an enrollment of some 15,000 full- and part-time students, this commuter college comprises a significant number of nontraditional students--older (the average age is 26), minority (mainly Blacks and Hispanics), single parent, first generation college students, etc.--many who are recognized by financial aid analysis to be low income as well. In combination, these characteristics identify a critical population with regard to attrition (Yess, 1983). Of particular concern is the minority student group which has experienced a decline, both state and nationwide, in participation in higher education over the past ten years. Such factors as reduced financial aid, unemployment, and more rigid admission requirements are major reasons for their lack of participation in higher education (American Council on Education).

To assist in the retention of these low-income students, the state of Nebraska enacted legislation in 1972 that would provide academic, financial, and personal support for state residents, attending the University of Nebraska at Omaha, who proved a high financial need. With the ultimate objective of providing a quality education for those students who might not otherwise afford this opportunity, the Goodrich Scholarship Program (named after state senator Glenn Goodrich who authored this legislation) was created with a three-pronged approach in mind: to provide financial assistance via full tuition and fees; to offer a specialized curriculum emphasizing the humanities and social sciences with a multi-cultural focus in mind; and to offer a number of academic and personal support services. With this framework, the program seeks to fulfill the goals of developing academic skills which will ultimately ensure career and personal success, developing social consciousness and responsiveness, building positive self concepts, and providing sound and innovative educational experiences. Thus, the program seeks not only to meet the basic financial needs of the low-income students but also to enhance their

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academic and personal development. As noted by Hall (1984), more significant reasons, other than financial need, may be responsible for student attrition.

Since its inception the Goodrich Program has always maintained its three-pronged approach and operational goals, which have been the foundation of intervention for its students. It has, however, undergone a number of changes in its basic policies, curriculum, and support services. From these various changes, a model of intervention has been developed both to recruit these students and to retain them until they have successfully completed their undergraduate studies. Such a model may then benefit the students in terms of increased education, as well as the program in terms of cost effectiveness (Yess).

RETENTION MODEL

This model of retention includes the main components of recruitment, communication, personal interviews, orientation, first semester activities, counseling, emergency loan fund, junior/senior interviews, student activities, and readmission. The uniqueness and success of this model can perhaps best be attributed to the extensive degree to which faculty and staff are active participants throughout the students' college careers while in the program. Thus, this model recognizes the interactions (mainly outside the classroom) between students and faculty/staff as the key to student retention. With regard to student/faculty interactions specifically, Pascarella and Terenzini (1979) find that the informal contacts between students and faculty seem to aid "in fostering students' social and academic integration and, thereby, the likelihood of students persisting in college" (p. 217). Likewise, with a corps of seven faculty, three staff members, and six graduate assistants (referred to, hereafter, as staff), the Goodrich Program has a solid base of outreach to establish and maintain these contacts with students.

Recruitment

The first component of retention is recruitment. This particular activity may not be ordinarily considered a retention effort. However, in our overall model of reaching out to all low-income candidates, mainly through the communication with all area high schools and related agencies, the message we send is important. We focus on potential students who might not otherwise be able to attend college. Our interest, support, and outreach become part of an overall message to this population that their application and subsequent efforts will be welcomed, and we will be there to support and help. In our view, this facilitates the whole process of getting through what is a complex task of applying for financial aid, getting references, having transcripts sent, and taking various tests such as the ACT the English Diagnostic Test (EDT). Therefore, the recruitment process itself becomes the first in a series of interventions suggesting that this faculty and staff warmly welcome them.

Communication

In this component, the program communicates extensively with each candidate and later with each selectee. Each step in the application process is monitored closely. A student needing references, transcripts, or the ACT will be informed by letter that there is a deficit in the file and that he/she is encouraged to follow through by providing the necessary materials. Follow-up telephone calls are then made toward the end of the application process to attempt one final time to secure the necessary missing materials and arrange for an interview. This process is time consuming and takes personnel, but it is viewed as necessary if the program is to make college accessible to a population not fully acquainted with the process and certainly not always comfortable negotiating the system.

Personal Interviews

Once it is determined that there is a final pool available from which to choose the scholars for the following year, a personal interview is scheduled. The purpose of the interview is to assess the motivation of the applicant, provide information about the program and its expectations, and begin the process of integrating the prospective student into the program. All faculty and staff participate in this process to assure that there is a close link between the faculty and staff and students from the beginning. Current students of the program are also asked to sit in on the interviews with the candidates in order to more effectively socialize them into the student body. Also, if interviews are missed, candidates are not simply rejected but offered the opportunity to reschedule the interview.

Orientation

Once the screening and selection process is completed, all candidates are informed by letter as to whether or not they are selected. All selectees are also sent additional information about specific requirements they will need to fulfill as Goodrich scholars. These students are then asked to sign an acceptance form and return it to the program. This procedure is, thus, their first interaction with the program as Goodrich scholars. Each academic year, the Goodrich Program selects seventy such scholars.

Subsequently, the program holds a special session--Goodrich New Student Information Day--for all its new incoming students. This orientation, conducted separately from the university-wide freshmen orientation, includes a review of the program's expectations and provides the students an opportunity to meet with the faculty and staff who will be working with them on a continuous basis throughout the fall and spring semesters. At this time they meet with not only faculty and staff but also upper-division Goodrich students who serve as "Goodrich Guides" in order to help them more fully integrate into the student body. Finally, there is a review of their registration and class schedules so that the appropriate class loads and requirements are assured.

First Semester Activities

The first semester can be critical for most students, especially this high-risk population in the Goodrich Program. For this reason there are intensive efforts to make the first semester successful. First, the program requires most of its new students, based on their EDT, to take the basic English composition course as taught by Goodrich faculty. They are also required to take either an autobiographical writing course or a critical reasoning course. Each of these classes is for three credit hours, and within each class, there is a generous faculty-student ration. For example, in the English course, there is a faculty member or graduate assistant for every ten students. In addition, twice per week there is a traditional lecture given, and in lieu of the third lecture, students meet individually with their tutor who works with them and monitors their progress on a weekly basis.

In courses other than English, the students are usually in Goodrich classes which consist of no more than twenty students. In this way faculty can monitor the progress more closely and can meet with students on an individual basis or refer them to academic counselors. At any rate, there is an opportunity to begin important college level courses within the security of a small number of students, with faculty attuned to assessing the outcomes early enough to intervene effectively should it be warranted.

Also, as part of the first semester requirements, there is a small group experience--the communication lab--where a professional counselor meets with groups of approximately eight students on a weekly basis. It is envisioned that this small group peer support will be effective in socializing the new students into the environment of the university. Various didactic materials are shared along with much exploration, via interactive exercises, of personal issues impacting the educational endeavor. Although there is no required attendance beyond the first semester for ongoing support groups, often groups will continue in the spring semester with such homogeneous students as women, minorities, or like groupings.

Counseling

Although students of any income level have problems which are academic or personal in nature, it is likely that low-income students have more severe problems because of the attendant concerns with money, transportation, work, and competing demands on time. To address these problems, the program has two full-time counselors: one focuses on academic issues and the other on personal issues. The academic counselor is skilled in English composition and an array of study skills and coordinates various other tutors who can teach business, math, science, and most other topics found in the departmental courses. This counselor meets with students daily on various issues relating to probation and suspension, removing incompletes, deciding on a major, and developing a plan of study for those returning after having stopped out for a semester or longer. In addition, since this low-income group includes many students who are older, married and with children, single parents, and working at least half-time, there are numerous stresses related to school, family life, and work that need attention. A professional social worker fills this counseling position and works with students in small groups and on an individual basis. The overall counseling provided by these two individuals is akin to that done in the wider university by the student services division. However, being within the Goodrich Program itself, the counselors have the advantage of establishing an identity, understanding, and relationship with this smaller group of students associated specifically with the program.

Emergency Loan Fund

Perhaps the unique aspect of the program is in the emergency loan fund, referred to as the Human Resource Loan. Students can request this loan for a brief period of time, usually not to exceed one semester. This can be a power tool to help students work through such crises as the breakdown of an automobile, need for textbooks, or the payment of rent or other monthly bills. This is a no-interest loan which has a limit of $200. Commonly, low-income students drop out of college simply because they are unable to weather the storm of a financial crisis. This opportunity to seek emergency assistance without hassle has often prevented students from dropping out of school because of such a crisis.

Junior/Senior Interviews

The Goodrich Program requires that the students take six hours of course work from the Goodrich faculty each semester for the first two years. When they reach junior status, they take all their course work outside the department and, subsequently, become less dependent upon the program for support. However, each spring semester, all program faculty and staff participate in the interviewing of all junior and senior Goodrich students. In this way, their progress can be monitored yearly. Such issues as time until graduation, career planning, area of study, finances, and grade point average can be assessed. Again, the interviews provide an opportunity to interact with the students, encourage persistence, and intervene early with potential problems.

Student Activities

Throughout the academic year, students of the program are invited to participate in a number of program-related activities: newsletter, social activities, student recruitment, and student interviews. The program's student services staff organizes these activities early in the academic year and works closely with the students in the planning and execution of the various activities. In cooperation with the program's sponsorship, the students organize a number of social events, including a Halloween and Christmas party in the fall semester and a multicultural dinner and graduation picnic in the spring semester. This cooperation builds on the relationships between and among students, faculty, and staff.

Readmission

Each year, the program extends the invitation to all its stop-out students to reenter the program and continue with their college education. This process involves sending these students letters which include the invitation as well as the procedures necessary for them to prove financial need for the scholarship and then gain readmission to the university. Should the students pursue this offer, they are then directed to meet individually with the program's academic counselor to begin planning their academic schedule. This may include arranging additional tutoring or counseling for their successful reentry in the university and program systems. Numerous students, who might not otherwise have returned to college without this support, are mainstreamed back into the university through the efforts of this operation.

DISCUSSION AND IMPLICATIONS

The results of the Goodrich retention model can be clearly stated. According to the statistics presented in table 1, the overall attrition rate is about 47%. One could conceptualize the retention rate, or the success rate, as a combination of those still enrolled and those who have graduated--the total which would be about 53%. The results of this model show significant differences among the various gender and ethnic groups. Most successful, as is the case nationally as well, are the White students; and within this group, there is a clear advantage among White females. The Asians have the highest rate of success, mainly due to enrollment percentages, with Whites following

Table I

Goodrich Scholarship Program
Status by Ethnicity and Gender

		Graduate	Attrition	Enrolled	Total
Asian	Females		5 35.7	9 64.3	14 63.6
	Males	1 12.5	2 25.0	5 62.5	8 36.4
	Total	1 4.5	7 31.8	14 63.6	22 100.0
Black	Females	76 29.2	117 45.0	67 25.8	260 60.5
	Males	30 17.6	98 57.6	42 24.7	170 39.5
	Total	106 24.7	215 50	109 25.3	430 100.0
Hispanic	Females	14 18.9	41 55.4	19 25.7	74 47.4
	Males	11 13.4	49 59.8	22 26.8	82 52.6
	Total	25 16.0	90 57.7	41 26.3	156 100.0
Native American	Females	2 5.7	26 74.3	7 20.0	35 56.5
	Males	3 11.1	22 81.5	2 7.4	27 43.5
	Total	5 8.1	48 77.4	9 14.5	62 100.0
White	Females	96 36.2	86 32.5	83 31.3	265 60.4
	Males	41 23.6	73 42.0	60 34.5	174 39.6
	Total	137 31.2	159 36.2	143 32.6	439 100.0
Total	Females	188 29.0	275 42.4	185 28.5	648 58.4
	Males	86 18.6	244 52.9	131 28.4	461 41.6
	Total	274 24.7	519 46.7	316 28.4	1109 100.0

TABLE 2

COLLEGE STUDENT ATTRITION RATES
GOODRICH PROGRAM AND NATIONALLY
(figures are in percentages)

	Goodrich Scholarship Program	Nationally
Blacks	50	58
Hispanics	57	68
Whites	36	40
Native Americans	77	65

Asians not included in national averages

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a close second. The rate of success and attrition among Blacks is the same at 50%. The greatest challenge remains with Hispanics and Native Americans, particularly among males. Nearly 58% of the Hispanic males have dropped out, and 81% of Native American males have left the program. Nevertheless, when one considers that this program takes only low-income students, many who are also very high risk academically, the success rate seems impressive.

In table 2, attrition rates of the Goodrich Program are presented, as well as national figures as translated from Astin (1982). According to these sources, attrition rates for college students nationwide are slightly higher than for those students in the Goodrich Program where the population is restricted not only to low-income students but also to a disproportionate number of academically high-risk students. Note that the attrition rate for Blacks in the program is just 50%; whereas, nationally it is 58%. With Hispanics the difference is even greater, with Goodrich attrition being 57% and the national average being 68%. The smallest difference is found in the White group where there is just a 4% spread. The Whites in the Goodrich Program fare slightly better with an attrition rate of 36%; whereas, nationwide Whites are at 40%. The one area where Goodrich students do less well is with the Native American student population. Neither nationally nor within the Goodrich Program is there as much success with this group. The Goodrich Program has an attrition rate of 77% of Native Americans, as compared to the national average of 65%.

It is clear from various sources that the effort to bring low-income and minority students into higher education is at a critical point. What is needed is some outreach and design which will be more effective in not only recruiting low-income (especially minority) students but also retaining and graduating them. The program continues the research effort in order to identify other programs and retention models which have been successful with this population. The state of Nebraska and the Goodrich Program have an impressive record in this area. However, its design needs to be compared with other models to determine if it can be refined so as to have even greater success. As always, the program's objectives include greater percentages in terms of student retention and ultimately graduation.

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A COOPERATIVE PROGRAM TO REMOVE BARRIERS CONFRONTING THE NON-TRADITIONAL STUDENT

Daniel J. Fields

There are several obstacles preventing the non-traditional student from attending American universities. Universities often appear to be either unaware of or unconcerned with this group of students. Higher education seems to be content to serve the needs of the traditional 18 to 22 year old student without realizing that this group is rapidly becoming the minority on many campuses. The post World War II baby boom generation has now aged beyond the traditional college student age. According to the Bureau of Labor Statistics, the proportion of the labor force from 16 to 24 was down to 30% in 1985. By the year 2000, it is projected that the 16 to 24 age group will shrink to 16%. Higher education will face stiff competition for this segment of the population from business and the military.

Lack of recognition of the problem of nonparticipation must be overcome before solutions are created and may be considered a major part of the overall problem. Universities are presently experiencing excellent enrollments. It is difficult for faculty members or administrators to perceive a problem of nonparticipation by the non-traditional student when classes are filled. Some in fact, feel that it is necessary for some barriers to be in place to limit growth. The feeling is that if barriers are in place the "good" students are properly motivated to overcome these barriers. This mind set has been established through the tradition of raising entrance requirements when enrollment quotas are being met. There may be a lack of empathy among university faculty members and administrators toward the non-traditional student.

Fortunately, for higher education, there will be an increased demand for education even as the pool of traditional students shrink. Workforce changes are requiring Americans to return to school. As the baby boomers begin to plateau in their careers due to increasing

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competition they are returning to school to improve their credentials and skills. Job obsolescence is effecting many, eliminating lower skill level jobs. Between 1979 and 1984 approximately 11.5 million people lost their jobs through plant closings, relocations and technical advances. Approximately 20% of those losing their jobs require additional skills and education for re-employment. Roger D. Semerad, United States Assistant Secretary of Labor for employment and training said, "Experts are saying many people will need to be retrained six to ten times in their working lives."

Technological advancement also effect those employed in its creation, as engineers and technicians must return to school to keep current. This combination of workforce requirements and population demographics points to an increase in non-traditional student enrollment. As a result, higher education will need to adapt to the needs of the non-traditional student.

The obstacles preventing university attendance by the non-traditional student, although formidable, are not insurmountable. Because there are a variety of obstacles, there is no one single act which will remove all the barriers. As with most complex problems it is necessary to analyze the components of nonparticipation in universities by the nontraditional student. At the same time, these components must be viewed as a whole to ensure that an action to resolve one component does not contradict others or create new problems. By keeping the larger problem of nonparticipation in mind it is also possible that some of the solutions will apply to a number of the components. This will assist in the establishment of priorities for implementation.

Lack of recognition of the problem can be overcome in several ways. By their sheer numbers the nontraditional students will make their demands known. Universities are beginning to recognize the growing proportion of non-traditional students. They are aware of population demographics, though they may not want to act upon the data.

Money also has a way of getting university administrators attention. In addition to the revenue generated by the increased enrollment of non-traditional students businesses are providing financial support. In seeking this support universities are becoming aware of some of the problems of the non-traditional student.

One of the major components of the problem of nontraditional student nonparticipation in universities is location. The non-traditional student is often working and enrolled as a part-time student which often prohibits him/her from living on campus. If the university is not near the job, a lengthy commute is required. If this obstacle is overcome, there are still logistical problems. Scheduling of courses is often a major problem. It is easier for university administrators to schedule courses at their convenience and have the students adapt. Also, professors may be reluctant to alter their workday to teach an evening or evening course. Scheduling difficulties increase as an entire degree program is planned in the proper sequence. Are the required courses offered? Are prerequisite courses offered prior to the courses for which they are required? It is sometimes necessary for the non-traditional student to miss a course when offered because of work or other conflicts. Often, when a course is missed, it may be years before it is taught again. Besides courses, the nontraditional student may need to schedule meetings with faculty members. If a group of faculty are involved, it will be difficult to meet with them at a time convenient for the student. If the non-traditional student finds ways of adapting to the above scheduling problems they must also find time to fit school work into their work and personal lives. Course papers, research and exams are inevitable during the annual budget or five year plan review at work.

There are also problems with facilities which are peculiar to the non-traditional student. After driving 90 miles to campus he/she has to figure out what to do with his/her car. The beauty of the pedestrian campus is somewhat less appreciable at night, especially after a long day at work. Once on campus, the non-traditional student finds offices, labs, the bookstore, and nearly everything else closed.

Registration, which is loathed by all students, is again particularly troublesome to the non-traditional student. It is amazing that with telephones, a fairly adequate mail system, and millions of dollars invested in computers that any student must stand in line for hours, carrying cards from one station to the next. This is especially troublesome to the non-traditional student who must take a day off work to travel to campus. This problem is compounded by the fact that, because they are part-time, they must endure registration more times than the traditional student. Unless they have an understanding employer and a job which permits it, registration alone may be enough to keep the non-traditional student from enrolling.

Commuting can and is being resolved in a number of ways. Extension offices can be established off campus. Classes can either be taught in local schools or within local business facilities. This solution would require that faculty be brought to the off-campus site. It is therefore necessary to either use adjunct faculty or to reward on-campus faculty for their efforts. It is often policy for faculty to teach off-campus as an overload, often at reduced pay. The solution here would be to allow faculty to teach off-campus as part of their regular load and for the university to provide travel expenses. The solutions to the registration problem are to permit registration through either off-campus extension offices, mail, or telephone. Most of the solutions to commuting problems require that universities either eliminate residency requirements or make it possible to meet the requirement in other ways. One way would be to permit students to take two week long concentrated courses. It would be possible for students to either take a vacation or educational leave of absence to meet such a requirement. Overall, the solutions to locational/commuting problems would be likely to affect the greatest number of non-traditional students. Implementation of these solutions would therefore be a high priority in the development of a plan to remove the barriers to university enrollment of the non-traditional student.

There are other barriers which are prohibiting university enrollment by the non-traditional student. Financial considerations may be either a barrier or a blessing to the non-traditional student. The employed non-traditional student may well have an opportunity to participate in an employer sponsored tuition assistance program. Their employment may also provide the financial means to enroll in a university. However, because of their increased living expenses, they may not have any more or as much money as the traditional student. The non-traditional student is less likely to be receiving parental support. Federal aid may also be available less often to the non-traditional student. Although recent legislation has removed some to the qualification barriers for the part time student, university financial aid officers are prone to favor the traditional student. A beginning point for the solution to this problem is for universities to monitor the proportion of aid dispersed to part time versus full time students. When it becomes apparent that aid is disproportionate to the population, it should be investigated; particularly if non-traditional students are being denied aid or information about it. Although part time students now account for over 40% of college enrollments a relatively small amount of federal aid goes to them.

Change is difficult to bring about in any organization. Universities, because of their size and traditions are particularly difficult to change. Professors get accustomed to teaching what they have taught in the past, in the manner with which they are comfortable and at times and places which are convenient and familiar to them. Administrators get entangled in their policies and procedures and find it easier to work within the existing framework than to create a new one. Although these conditions will prolong the problems of the non-traditional student in higher education there is reason for hope.

The forces for changes in favor of resolving the problems of the non-traditional students will make their demands known. They will also have the backing of the business community. In some instances, business is developing an educational system of its own. This is sometimes in cooperation with higher education, sometimes in competition. Cooperative efforts between the business community and universities to improve worker skills may be a way to force the universities to realize that some changes are required to receive the financial rewards. Over time, the law of supply and demand will become apparent to those in higher education. Those universities which know their market and serve it will have successes.

It has been my pleasure to be a part of a cooperative program which has successfully met the needs of the non-traditional student. The program is an off campus B.S. degree program in Manufacturing. It received an award from the National University Continuing Education Association as an innovative program. Additionally, the author and Dr. Richard Burke, a Vice President at Western Michigan University (WMU), testified at a congressional hearing on "Shaping the Work Force of the Future". The program's uniqueness lies in the fact that several key elements interact resulting in benefits to a number of companies as well as WMU and the students involved.

These elements include: A human resource development plan tailored to meet the needs of a changing work force in a changing industry, the contracting of courses in a sequence leading to a B.S. degree, availability of educational opportunities through a system of regional extension offices, the roles and benefits of industrial advisory committees, 2 + 2 degree programs and open communications between industrial and educational leaders and nontraditional students.

The program was developed and implemented in Muskegon, Michigan. Muskegon is a heavily industrialized community of approximately 158,000. The foundry industry there has been the basis of both economic boom and decline. Some of the largest foundries in the world have developed here, producing castings for the auto, truck and agricultural equipment markets. As the foundry industry declined so has the local economy. Muskegon, in the early and mid 1980's has experienced several plant closings and one of the highest unemployment rates in the U.S..

The long range HRD plan of the largest foundry in the area, CWC Castings Division of Textron, provided the stimulus for the development of the program. Although employment was dropping rapidly, CWC found that it still had a demand for engineering and technical personnel. As it was changing from a labor intensive to a capital intensive industry new processes and equipment were constantly being developed and installed. The combination of selective growth and displacement caused unique HRD problems which could be resolved through internal development. However, because of its proximity to engineering schools this option wasn't, at the time, feasible.

WMU has one of its 8 regional offices in Muskegon. But it was not offering engineering courses because the demand didn't justify doing so. CWC developed a program based on its needs and fulfilled WMU's requirements for its 2 + 2 Manufacturing degree program. This would permit current employees to complete the first two years of study at Muskegon Community College(MCC). WMU's regional director was initially approached to explore the possibility of providing classes for CWC employees on a contractual basis. CWC had "purchased" entire sections of courses at MCC in the past. But this had never been done on a scale necessary for an entire degree. Methods of minimizing costs by using CWC facilities and personnel where possible were considered. The contract proved infeasible because there weren't enough CWC employees to justify the expense. At that point two other large foundries in the area, Sealed Power and Howmet, were approached with the idea of splitting the contract. Due to a declining economy this was not readily accepted, so even more companies were included in the discussion. This was done through a local group of industrial relations executives and the Muskegon Manufacturers & Employers Association. The idea now was to split the contract among several companies. Financial responsibility would be according to student (employee) participation. This, of course, was becoming very cumbersome as details were included.

As discussions continued on the contractual issue potential students were being identified. In addition to companies recruiting qualified participants for the contract courses, MCC graduates were expressing interest, as were individuals from non (contract) participating companies. WMU's extension office was compiling a list which was by then up to about 80 names.

With the aid of Continuing Education personnel on campus and the Director of Off Campus Engineering, the College of Engineering and Applied Arts agreed to offer the sequence of courses without a contractual guarantee. There were still problems of lack of faculty and facilities. The benefit of the companies' involvement in the program's development was now apparent. Company representatives helped recruit adjuncts. CWC provided classroom facilities in a plant directly across the street from WMU's extension office.

Company representatives also helped solve other problems. When problems were experienced in a statistics class a company representative attended the class and talked with the instructor. Many students, because of their applied math backgrounds, were in trouble. After a meeting with WMU's regional director, WMU hired a tutor to conduct extra sessions each week. The students with problems were then able to keep up with the rest of the class. In another instance a student was unable to attend classes because he was working nights at Howmet. After reviewing the problem Howmet's Personnel Manager (who was involved early in the program) had the employee transferred to the day shift. In addition, the employee was given a position in the Manufacturing Engineering Department, where he could apply his newly acquired and much needed skills.

There are several other success stories. CWC's Director of Facility Engineering was the program's first graduate. He had previously completed most of an engineering degree on campus at WMU. However, because he had accepted a job at CWC he was unable to pursue his degree. This program made it possible for him to resume his studies. Another CWC employee, an hourly worker, was injured on the job during the course of his degree program. He was able to get his degree and is now a Manufacturing Engineer rather than a workers compensation case.

The companies involved in the development and delivery of the program benefit in several ways. They are able to develop existing employees for increased work force flexibility. This improves morale while providing stability. Specific courses also provide cost effective training in key topics such as quality control. The skills acquired are therefore immediately transferred back to the job for a better understanding of concepts as well as a rapid return on the companies investment.

Successful partnerships are not, however, the result of a single act or isolated element. The university must have programs which meet the needs of a changing workforce. To know what these needs are we must know what industries long range HRD plans are. This is done through advisory committees and open communications with company representatives. Then, programs must be available and coordinated through an extension network to be of benefit to the entire area served. Finally corporate and university representatives should be willing to put forward extra creative efforts (such as contracting of courses) and ensure that all of the elements are in place. Although one element doesn't ensure success the absence of one element may well mean failure.

Surely, not all of the barriers confronting the non-traditional student have been addressed in this paper.

Nor will those identified be resolved completely nor quickly. It shouldn't be expected that a university can or will adapt all of the potential solutions offered here. Situations vary and some of the potential solutions which do apply will take considerable time to implement. It will be frustrating, challenging and rewarding work to be part of the activities taking place within the university setting regarding the non-traditional setting. Hopefully, some part of this paper will make this work easier for those involved in providing assistance to the non-traditional student.

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THE RETURNING ADULT:
A NEW MODEL FOR ACADEMIC SUCCESS

H. Ramsey Fowler

I don't know about your university, but at mine adult undergraduates are treated rather indifferently. We still barely recruit them, assuming that they'll find us if they need to. We still make it virtually impossible for them to be awarded scholarships, and indeed discourage donors from specifying that part-time students can qualify. We still offer most of our courses during the day--though we are getting better about evening and night classes; and a few professional programs are available for undergraduates in the evening--but not all, by a long shot. And, of course, we continue to close almost all of our offices just as adults are getting off of work.

Oh, we do some very good things too. We have University College, which allows certain nontraditional undergraduates to design and complete individualized and interdisciplinary degree programs. For some others, we have a program called Mini-College, which helps to soften the re-entry experience. We also have an Office of Evening Academic Services, which provides some minimal after-hour help. And the university supports an Adult Student Association.

To tell the truth, however, we still think of our adult students as the exceptions--even though they currently make up over 40% of our undergraduates. This fact is apparent in the profile of the successful college graduate that emerges from our literature. He or she has earned a degree in four or five years, with an overall GPA of 3.0, or better; has probably received honors; has appeared on the dean's list; and may have held an academic scholarship--all the while having participated in various student activities. In addition, he or she has scored well on a graduate or professional school entrance examination and has been accepted into a respected program, or if not that, then has secured an entry-level position with a good firm, school system, government agency, or the like--and all by age 22.

Adults Break the Model

If the preceding is the model for success at the university, then most adults are doomed to failure. At least it is hard to call successful a student who has taken eight to ten years to earn an undergraduate degree; who has not received an academic scholarship (adults rarely qualify for scholarships); who has not participated in student activities (no time and probably no interest); who has scored indifferently--as adults frequently do--on a standardized graduate or professional school entrance examination; who is enrolling in a

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graduate program at a university close to home, even though she could have qualified for "better"; and who has been promoted within a work system, into a job category with a name that only someone in personnel could really love or understand.

It may seem strange to think the students with this kind of profile could be catalysts for helping us revise our ideas about academic success; but they are. To indicate why, however, we need some examples.

1. A thirty-four year-old man, employed by the FAA as an air traffic controller. Eight years ago, he completed the arduous classroom portion of his ATC preparation, being one of the 50% in his class who did not fail. Several years before that success, however, he had been suspended from college, having accumulated seventy-eight semester hours of credit, but with a GPA of only 1.82. Upon his return to college a decade later, he earned a 3.36 average, but graduated with a lackluster 2.35. He is to be promoted into a management position with the FAA, but it will be difficult for a graduate admissions committee to account him a success.

2. A sixty-two year-old woman, recently widowed, who worked for thirty-five years as a social service volunteer. In excellent health herself, and wanting to serve other elderly persons in a professional capacity, she enrolled in a geriatric services program at a local university. Over a period of two years, she completed forty-two semester hours of courses with a grade point average of 3.60. Then she left the university to devote all of her time and energy to service. Because she is a college dropout, it is doubtful that the academy will consider her a success.

3. A thirty year-old firefighter who, because of the demands of shift work, enrolled in an external degree program in fire prevention technology. He graduated with an overall GPA of 3.82 and is now enrolled in a graduate program in public administration. He can do this because he has been promoted into supervisory position and now works regular hours. However, since academic policy at his university required that he be a full-time student to qualify for the dean's list and that he complete sixty graded hours in residence to graduate with honors, he received no special recognition, ever, for his undergraduate achievements.

Whether we like it or not, we must respond to a new student population ; and it is made up of drop-outs, part-timers, middle-aged and senior citizens, distance learners, and other malingerers in the halls of ivy. It is no surpise, and really no criticism, that for the most part, our reward systems have not yet responded to the special and perhaps unlikely successes of this new clientele. On the other hand, we need not despair, for our adult students, rather more than our traditional ones, will tell us when they are being neglected. And they may very well suggest the means by which we can lessen that neglect.

Listening to Adults

I am suggesting that the aims of education for adults may be different from those of traditional students--that they are likely to bring their own agendas to university study, rather than letting the university set them. By and large, this makes adults intentional and goal-oriented, and quite able to talk about the purposes of their own educations. Often, they can talk this way because they are not hampered, as traditional undergraduates often are, by considering such purposes in the abstract. In addition, they are frequently able to articulate their own emergence as developing adults--intellectually and ethically.

A model for adult success at the university and an appropriate plan of reward, should be related not only to how adults understand the aims of education, but how they articulate and evaluate the results of their undergraduate experiences. To give insight into what these perceptions are, I will comment upon self-assessments written by University College graduates. These self-assessments are not evaluations of performance in an entire degree program, but in a nine semester-hour independent study Special Project which all University College students complete at the end of their programs. In the Special Project, students are asked to focus their interdisciplinary major program of study (called a "coordinated study" in University College jargon) upon some specific concern, topic, or problem. The presumption here will be that these self-assessments are reflective of what students feel about themselves and their educations.

1. **"The registry consumed a large quantity of my time this semester, but knowing its widespread uses at the Med makes it worthwhile."**

   "The resulting program should be of benefit to any size fire department's training program. The text should provide chiefs with specific guidelines for controlling any propane leak or fire, regardless of its size."

The first reflection is upon a burn registry done for the special emergency division of the City of Memphis Hospitals. The second was written by a student who completed a program in fire prevention technology. Both statements are indicative of a characteristically adult desire to look outward from education, to measure success at the university in terms of usefulness in the workplace or to society. Having returned to the university with a sense of purpose, and often grateful to employers for financial assistance or motivational support, adults will frequently express a desire to give back something for what they have gotten.

2. **"My special project gave me an opportunity not only to learn more about myself professionally but also the privilege of developing a useful component within the alcohol and drug services in the Memphis area."**

> "Throughout the project, I was able to complement the two aspects of my interdisciplinary program of study, Marketing and Graphic Design. Therefore, I proved the importance marketing has in Graphic Design."

Complementary themes of personal and professional growth merge in statements such as these which express the investment adult students can make in their professional educations. A sense of personal accomplishment is closely related to a sense of personal worth and the contribution one can now make to society or to a profession.

3. "The research not only increased my knowledge of the disease process and available controls and treatments, but it also gave me insight into the disease process on a personal level. This research has enabled me to relate to the special problems and needs of diabetics in a way I was unable to do before."

> "The Special Project has proven to me that I am capable of running a Development Office, regardless of the mission of the institution. However, quality work comes from a dedication to the mission of the organization. My best work will come from working for an organization whose purpose I am committed to."

In statements such as these, it is apparent that the educational process has given students value-shaping insights into themselves and their careers. It has made each student feel more competent and has helped to clarify his and her commitments with respect to work now and in the future. In addition, there is a suggestion that each has discovred a fresh motivation. To be sure, the catalyst for these insights was the Special Project requirement. However, had it not been for the academic preparation each experienced it is likely that neither would have been able to so incorporate the effects of education into larger personal value systems.

4. "As you read the handbook, you should detect a melding of practical and formal training, especially in the principles evidence and necessary proof, substantive criminal law, judicial proceedings, and legal procedures."

> "In the 500+ hours I have spent on this project, I have employed many of the relaxation and meditation exercises, nutrition and exercise suggestions, into my own life. I support very strongly the suggestions and exercises given in the guide for reducing stress. I know them to work in my own life."

The first comment was written by a postal mail-fraud inspector who compiled a definitive guide entitled Investigation of Complex Mail Fraud Cases; the second, by a woman who completed a program in stress management. Both express a success theme common to adult students, namely, the desire to create a successful marriage between education and experience. There is a sense of power that comes from understanding--or at least believing--that our motives reinforce each other, and that sometimes they may even be unitary, not divided. In the specific case of adult students, this desire often expresses itself as a need to combine formal and experiential learning.

5. "One of the most enjoyable experiences undertaken during the project was learning to photograph flowers and plants. I whetted my appetite to learn more about the art of photography, particularly as it relates to plants."

> "One of the major comments I must make in regard to my Special Project is that I was honestly able to come to the conclusion that I really don't know very much at all--but I'm excited about learning. If self-satisfaction is a characteristic of success, then I've been successful."

> "It was an enlightening time, for I discovered how much I enjoyed teaching and that I was good at it. I know that this subject matter is my life's work; and along with counseling nad ministry, my working days will also include teaching and writing. I know now that I can do those things and do them well. My goal now is to become even better and continue to grow in my understanding and care."

New learning and the pleasure that comes from it is another frequently expressed reaction. Sometimes students discover the pleasure of doing something they have never done before, or of learning about something they had never thought about before. Sometimes, they just learn the joy of learning. Sometimes, they learn about themselves. Although their feelings cannot be measured like a G.P.A., they certainly transcend any definition of success we educators might infer from a transcript.

6. "But, I learned a great deal as it is. I learned I could work with older people. I had given up on elderly people because I didn't want to go through the hurt and pain of having one die on me. I was thinking only of myself, not of the elderly people It was the paradox of wanting to work with those it could hurt me most to see die. I was looking for some resolution to this paradox. This was a resurrection project for me."

> "It may not have measured up to the best anyone could do, but I feel it was close to the best _I_ could do."

> "I know that I am capable of functioning in a creative way under a tremendous workload and that I can bear much more emotional pain than I ever dreamed would be possible. This project stretched me to the limit, but now I know more about my own body and its boundaries, now I know more about my own psyche and its potential."

Perhaps it is because adults can relate their educational experiences to serious—even severe—life experiences that they are often moved to make personal estimates of their own success. Self-knowledge, self-understanding, and self-realization are all viewed as critical outgrowths of the education process. Education is not something to be "gotten." It is something to be incorporated. Even though the institution can do nothing to guarantee the expression of this sense of success, it can encourage it.

The New Model

Somehow, considering a new model for adult academic success is like trying to conceive of the "model" adult. It cannot be done in any rigid way. However, self-assessments such as those quoted just above suggest dimensions to success that institutions can seek to reinforce. To the extent that these remarks are representative, it becomes apparent that in addition to traditional external supports (grades, honors, acceptance into graduate programs, etc.), adults are very sensitive to the inner rewards of education, viewed in terms of a relationship between the individual and the workplace, the profession, or society, or between the individual and him- or herself.

In addition, adults value change and enjoy giving definition to the process as it has been manifested in their lives. Indeed, it is possible that many of the adults quoted above know better even than their teachers that education can have a profound and lasting effect upon people, that it can alter them.

Any model, then, which seeks to reinforce characteristic adult motivations for returning to college and adult interpretations of success needs to be sensitive to the fact that such students view their work in the university as a continuation of their lives, as an opportunity to become more productive members of society, and as a welcome chance to grow inwardly. Said another way, since adults are often so able to articulate their own sense of success, we will reinforce their decisions to return to college as much by paying attention to the systems that we provide them as by any external set of rewards.

Institutional Responses

The presumption I am making is that institutions have a responsibility to respond to human needs, and that higher education has a special responsibility to meet, in all of its students, the need for respect. We have many supportive systems in place for traditional undergraduates. What follows are some suggestions appropriate to adults. I have intended that they respond to the attitudes expressed in the self-assessments quoted above.

1. **Manage traditional reward systems flexibly.** Adults are proud to earn high grades, to be recommended for membership in honor societies, to appear on deans' lists, and to graduate cum laude. Sometimes they are excluded from such honors because they are part-time or transfer students, distance learners, and

the like. For the sake of morale--if not simply for the sake of fairness--it would be helpful if there were sliding scales for dean's list eligibility (i.e., to be eligible , one may have to earn a 3.75 with six or nine semester hours, 3.5 with twelve or fifteen semester hours) or adjusted periods of residency for graduation with honors.

2. **Acknowledge and publicize ways in which adults achieve success.** Like the first suggestion, this one only asks that institutions adjust systems that are currently in place. We are understandably proud of a twenty-one year-old graduate who is admitted to a well-known graduate or professional school or who is hired into an entry-level position with a respected firm; and we publish these achievements in newsletters and in news releases. We tend, however, not to praise publicly the widowed woman who has changed her status from volunteer to professional (especially if she has the effrontery not to graduate), the man or woman who is promoted, based upon successful undergraduate achievement, or those persons (and with them their families) who have the courage to give up unsatisfactory careers and to prepare for satisfying ones. These are genuine success stories, and deserve to be featured as well.

3. **Provide academic means by which adults can view themselves as lifelong learners.** One means of doing this is to recognize that college-level learning can and does take place outside of regionally accredited classrooms. There are a host of military and professional training programs which have been assessed for credit equivalencies by the American Council on Education. Portfolio assessment philosophy and procedures have been developed over the years by CAEL, the Council for Adult and Experiential Learning. This is all well known, though relatively few institutions of higher education in this country have portfolio review policies and procedures in effect. Admittedly, persuading faculty of the college-level academic validity of off-campus learning can be an obstacle, but it can be done--and if we are serious about respecting what adults bring to our campuses some system which allows them to merge experiential and academic learning is in order.

4. **Provide academic systems which encourage adult learners to enroll.** Solutions that I will suggest here are self-evident. It is the principle that may not be. If we want to encourage adults to return to our colleges and universities, we cannot treat them as if they were children. That seems obvious, but if it were, then we probably would not be so slow about scheduling courses in the evening, or on the weekends, or in other nontraditional manners; we would all be offering more courses in a directed-study, or televison-assisted, or other tele-instructional mode; we would have more off-campus centers; and so on. We would probably also be more creative about using noncredit continuing education as a support and feeder for academic study. Well, perhaps all of this is done very well at your institution; but where I work we still have a lot to learn.

5. **Provide academic programming flexible enough to allow adults to make uncommon connections.** Adults are ordinarily much better at knowing what they want from an education than a typical 19-year old could ever be. This is probably why the profile of students in nontraditional colleges and programs

often looks so similar--35 or 36 years old; initiating, enhancing, or changing a career; a dropout from college. etc. Not every university will want to incur the cost of setting up a separate degree-granting college to work with such students, though the financial return from students who come back because of the college more than outweighs the expense of the office and its functions. On the other hand, you don't have to have a new college to have a new program; and if that program is adequately supported, it can work. And if that program allows students to develop interdisciplinary programs suited to personal/professional needs, it will, almost by definition, serve adults.

The range of administrative difficulty present in these suggestions is quite vast, I realize; but I list them all together to suggest that there is a wide range of institutional response possible to support characteristic adult needs. Some are more expensive than others, to be sure. On the other hand, not even the simplest and least expensive change can take place without a changed attitude toward adults on our campuses. And toward that end, I would like to risk two additional suggestions, both of which are fairly quixotic.

First, **provide adult students with sanctioned opportunities to validate their undergraduate experience.** University College requires that students do a self-evaluation of their Special Projects. As it turns out, students are at least as interested in evaluating themselves as they are their projects, indeed, sometimes cannot separate the two, the need to study themselves and to articulate their changes is so powerful. I sometimes think that were we to ask for a more general assessment of self, we would get more cliched answers--that the reason for the responses that we get is that they come out so spontaneously. But I don't know. That would be another way of doing it. Small groups have been tried, with success. Other programs are designed so as both to systematically enhance personal development, as well as consciousness of it. Alverno College is an excellent example.

Second, **ask adult students to write about the relationships between their educations and their personal development.** In some ways, this is the hardest to ask, because it is the hardest to do; and it requires that universities really believe what they say about valuing the development of one's spirit through education. I know the institutional impediments to this kind of openness, and I know that many adults will resist it as well. But when the relationship is articulated, something very powerful happens, something that makes us realize that education can touch the soul. Statements which approach this dimension of understanding have been quoted above; but I want to quote two more, not because they are typical, but because they show how reflection upon the educational process can help thoughtful adults bring order to their lives. It doesn't happen all the time, indeed, it may not happen often; but when it does it is remarkable to hear and may be the finest sort of reinforcement that colleges and universities can provide as they look for appropriate ways of honoring adult success.

1. "My life style is that of an adult who has returned to college after an absence of more than a decade, during which time she developed within the complexity of vocation, parenthood, and

a newly imposed directive for living. . . .On one level, my experience in University College is helping me acquire . . . knowledge and the application of knowledge to important issues of our time. On another, more personal level, I am discovering ways to apply that. . .knowledge to important issues of my life. This, I believe, is the real aim of education, and is certainly consonant with my career goal. For 'an analyst,' as Jung himself said, 'can help his patient just so far as he himself has gone, and not a step further.'"

2. "From the early days of civil rights and peace activism to the present, I have functioned from a perspective of lofty idealism and humanism, determined to rescue the downtrodden and demoralized. My awareness of the situational ambiguities of the very fundamental structures of our society and its organizations has modified my world view. . . .The value of a clear, realistic, approach in the field of human services cannot be minimized. Without a broad-spectrum, accurate overview of the compelling societal forces that direct organizations, a human services worker becomes no more than an ineffectual pawn. . . .The ultimate educational value of this effort has been a redefinition of my original vision. People cannot be rescued, but they can be re-educated to minimize their distress. This society does not need another well-meaning but destructive "Hepper." I have been educated to realize the enormity of challenge in Hippocrates' admonishment, 'Firstly, do no harm.'"

Conclusion

It may be that my specific suggestions about how adult undergraduate success can be rewarded are less important than the idea that colleges and universities need to find creative ways of doing this. It is not that adults should be--or even want to be--evaluated differently from traditional students, rather, that colleges and universities recognize their adult achievements and be serious about helping to validate the decision of such students to return to the university. It's always difficult for adults to make that decision, especially--as so often happens--when early college experience was less than successful and/or when there has been a hiatus of 15-20 years or more between previous and current enrollment.

My remarks have suggested that adults want programmatic opportunities which will correspond to their special needs and that they appreciate being able to articulate to themselves and to others their understanding of the aims of their own educations and of their sense of accomplishment.

Of course, by now, you realize that I do not have a fixed model for adult accomplishment and that what I am suggesting is that administrators and faculty need to adjust their attitudes concerning success at the university to the realities of 35-, 45-, 55-year old undergraduates. Failure to do so will put us in the outrageous position of representing high achievers as indifferent, of dismissing the efforts and achievements of those who don't want to earn degrees or who want to earn them later in life, of denying honors to those who have earned them, and of totally ignoring the fact that adult students are able to incorporate their educations into their autobiographies and their projected futures in the most creative and meaningful ways.

It has long been a wonder to me that colleges and universities have not wanted to capitalize on their rich resource of adult graduates of undergraduate programs. Which of the students represented in these remarks would you not want to speak for education and for your university, at recruiting sessions, on talk shows, or wherever?

An understanding of the aims of education confers authority.

DEVELOPING CAREER SERVICES FOR NON-TRADITIONAL STUDENTS: A CAUTIONARY TALE

John R. Haire and Ashton D. Trice

The present paper addresses issues that need to be confronted when a career program expands its services from those offered to residential, traditionally-aged students to non-residential adult students. Two easy options for developing programs present themselves: the first option is to offer the services available to the traditional students in a delivery system that will meet the needs of non-traditional students (e.g., offered during evenings or week-ends); the second option is to utilize a model of adult learners or experts in the field in constructing a program. A third, more difficult option exists: to conduct a systematic needs assessment of the adult clients and to build a program around this needs assessment.

We have explored each of these three options and have information from the following sources:

1. During the first year of program implementation, the program components offered to traditionally aged women on a small (N = 650) liberal arts campus were made available to students (N = 400) in non-residential degree program for adults. Program utilization data from that first year was used to compare the traditional vs. adult students' use of the program components.

2. At the beginning of the second year of the program, traditional and adult program faculty were surveyed concerning their perceptions of the needs of their respective student constituencies. The profiles of program recommendations by faculty from both the traditional and adult programs can then be compared to the actual use by students.

3. Midway during the second year of the program a systematic survey of students assessed the perceived needs for career-related services by students. This assessment was compared to the utilization data and the perceptions of the respective faculty.

The Traditional Program

The Rosemary Sena Career and Life Planning Center at Mary Baldwin College was established to provide career services in the context of a liberal arts institution. The Center provides a number of services under four major categories:

A. Academic skill development
    1. study skills
    2. time management
B. Career interest development
    3. career exploration
    4. career counseling
    5. interest/ability testing
C. Job search skills
    6. resume writing
    7. placement file

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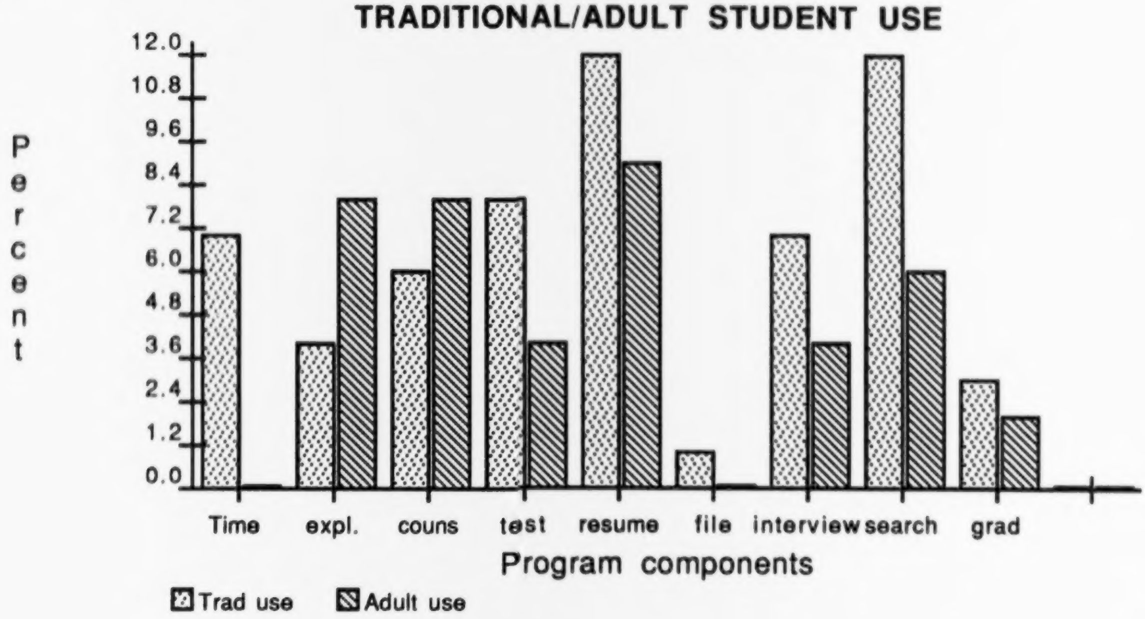
8. interviewing skills
9. job search strategies

D. Life planning

10. graduate school information

Inspection of the records for the first year indicated that about 35% of the traditional students and 10% of the adult students used one or more of these services. Figure 1 shows the relative use of these services by traditional and adult students. Although there was a substantial difference in the percent of traditional vs. adult students using the center, the patterns of use are strikingly similar. (The study skills program was not in place during this year.) The three most frequently used services by traditional students were resume writing, job search strategies, and interest/ability testing, while the three most frequently used services by adult students were resume writing, career exploration, and career counseling.

Figure 1.

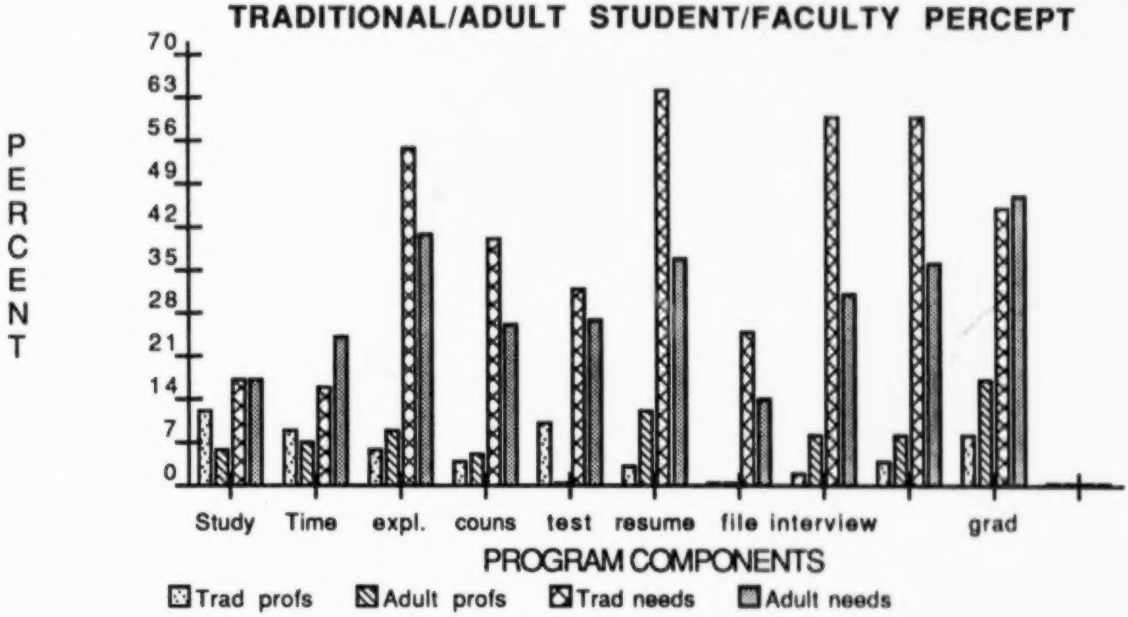


The high demand for career exploration and career counseling among the adult population, most of whom are in their thirties and forties, came as something of surprize, as many models of the adult learner emphasize self-direction in goal-oriented programs. Two observations may place these findings in perspective. First, many of the students in the Mary Baldwin Adult Degree Program are displaced homemakers and women returning to the academic/job world after raising families. Many of these students need a reorientation to the contemporary world of work and the current academic paths that lead to particular careers. Second, there is a stark contrast to what is usually involved in career exploration/counseling between adult and traditional students: many traditional students have little or no focus at the beginning of their career exploration: all options are open; on the other hand, the typical adult student in career exploration/counseling is seeking to know the range of career options within a partially developed plan. The adult student in exploration groups may be sure of her/his major and may know the general field in which s/he wants to work (often, has worked). Frequently, adult students in exploration programs are seeking external validation that their academic decisions are sound or are seeking information about ways of enhancing advancement possibilities after the entry level job has been attained.

Faculty Survey

The faculty survey asked for indications of which of the 10 program components they envisioned recommending to any of their present students. Ten of the eleven Adult degree faculty and 42 of the 55 traditional faculty responded. Figure 2 includes the results of this survey. While only two traditional faculty and no adult degree faculty responded that they would not recommend any career services, the percent of endorsement was relatively low. Among traditional faculty the three most endorsed services were study skills, interest/ability testing, and time management, reflecting a campus orientation; among the adult faculty, the three most recommended services were graduate school information, resume writing, and career exploration, reflecting a orientation beyond the B.A.

Figure 2.



Student Needs Assessment

A random sample of 140 traditional students (on campus) and all adult students (by mail) were surveyed concerning their immediate and long-term needs for career services. Eighty-seven percent of the traditional students and 52% of the adult students returned forms. Ninety-eight percent of the traditional students indicated that they intended to use one or more of the career services before graduation, while 78% of the adult students indicated similar intentions. Figure 2 also shows the results of this survey. In every category, student-expressed needs substantially exceeded the results obtained from the faculty survey. Traditional students expressed needs primarily for resume writing, interview skill development, and job search strategy training, while adult students indicated needs for graduate school information, career exploration, and resume writing. Traditional students indicated a need for more services (Median = 4) than adult student (Median = 2).

Recommendations

Table 1 shows the differences in adult vs traditional student for the three most requested/used services from the three data sources:

Table 1. **Most requested/used services by student group and data source.**

	ADULT			TRADITIONAL		
	USE	**FACULTY**	**STUDENT**	**USE**	**FACULTY**	**STUDENT**
1.	resume	graduate	graduate	resume	study	resume
2.	explore	resume	explore	search	testing	interview
3.	counsel	explore	resume	testing	time	search

While there is substantially more agreement among the three data sources for adult students (where resume writing and career exploration appears in all three 'top three') than for the traditional students (where no topic appears in all three top three lists), there are reasons to be cautious. The adult degree program at Mary Baldwin is organized in five geographic centers. When the expressed needs of students were examined for these five centers, only resume writing was in the top three for four centers: nine of the 10 services found a place in the top three at one or more center. Thus, we are suggesting that these results are specific to particular programs and the demographics of consituency groups.

Specifically, we suggest:

1. There is a need for career services for non-traditional adult students despite models that might suggest that adult students are career-directed.

2. While less than 10% of our adult student availed themselves of career services distant to their location, over three-fourths indicated a need for career services: career services must be "taken -on-the-road" or delivered in ways that accomodate the schedules of employed/home-making students. Many services can be adapted to meet these demands: computer programs for resume writing or career exploration can be shared; library resources on graduate school information can be made available in distance locations; tests could be administered in the home locale and interpretations made available at a later time at a counseling center; time management materials could be developed for specific student characteristics (e.g., working, single parent; swing-shift worker).

3. In-service programs for adult program counselors and faculty should be developed to make them sensitive to the range of career-related needs of their students.

4. Programs should be developed on the basis of multiple data bases that would include analyses of program component use, input from professionals, and periodic student needs assessments.

ELIMINATING OBSTACLES TO STUDENT'S SUCCESS: ONE APPROACH TO AIDING ACADEMICALLY UNDERPREPARED STUDENTS

by Suzanne Logan

Texas Tech University, like other institutions, has found itself in recent years searching for ways to remain viable and financially healthy. The University has chosen to direct much of its energy toward becoming a well-known research institution in order to enable it to draw in such resources as talented faculty and students. Toward this goal, Texas Tech needs to increase the percentage of graduate students as compared to undergraduate students.

This direction for the University resulted in a recommendation by the Faculty Senate's Admissions and Retention Committee to raise admission standards for incoming students. The purpose of raising standards is to attract more talented students who will hopefully remain at Texas Tech to pursue graduate work. The likelihood of such students persisting in higher education is higher than that of other student groups; therefore, the Faculty Senate Committee felt that these students should be the targeted population for recruitment.

In January, 1987, The Admissions and Retention Committee released its findings and recommendations. the findings showed that the percentage of the freshman class that was conditionally admitted had jumped from 33% in 1984 to 41% in 1985 and to 47% for the fall of 1986. The committee recommended that conditionally admitted students be required to pass six hours in summer school in order to enroll in the University the fall semester following their high school graduation. One consequence of raising standards, however, is the potential for even more students to be classified as conditional students. In light of this study, the Division of Continuing Education at Texas Tech began searching the literature to determine what had been successfully done at other universities to assist academically underprepared students being conditionally admitted. (Admissions and Retention Committee, 1987)

Seen as one of the largest obstacles to a student's success, "academically underprepared" has been defined as needing skill development, not meeting regular admissions standards, or scoring below a designated cutoff on a placement test.(Noel and Levitz, 1982) "Underpreparedness is a relative matter; every institution has students whose credentials put them in the lowest 10-15% of the total class in terms of academic readiness."(Noel and Levitz, 1982, p.1)

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Studies have determined academically underprepared students are among the most dropout-prone in higher education. However, it has also been discovered that the dropout rate among this group can be significantly reduced.(Beal and Noel, 1980)

The challenge of increasing retention among the academically underprepared is hindered by those who maintain that academically underprepared students' needs cannot be met without lowering academic standards of their institutions. Nevertheless, many colleges and universities have proven they can maintain the integrity of their academic standards as they help academically underprepared students succeed and persist by providing effective and efficient academic and personal/social support systems. Programs providing these support systems most often include academic advising, career/major/life planning, assessment and diagnosis of skill levels, transition/orientation activities, tutoring, and study or survival skills.

Noel and Levitz (1982) report that in programs designed to aid academically underprepared students, the most common objective is providing academic and basic skills support followed by enabling students to succeed in college or to meet their educational goals. The third most common objective is providing nonacademic support. Academic and basic skills support is necessary but insufficient if it is not supplemented by a program that aids students in learning "to motivate themselves, to understand their own strengths and weaknesses, to bolster their confidence in their own abilities, to negotiate the academic and social system, to adapt effective and efficient methods of processing information, and to alter previously established attitudes about their own potential and their sense of self-worth." (Noel and Levitz, 1982, p.7)

During the last twenty years, numerous programs designed to improve retention of academically underprepared students have emerged across the country. From a survey of 2,785 colleges, Wright (1985) reports that 82% offered academically underprepared students at least one support course in reading, writing, or math and 90% offered support services such as diagnosis, learning assistance labs, tutoring, and counseling. While there is much similarity among these programs designed to help academically underprepared students, a vast variety of form and content exists within the field of support instruction with extensive experimentation and diversity of curriculum design common. Morrison (1974) reported more than two-thirds of all colleges tailor their support programs to their students' needs by supplementing compensatory academic coursework with various types of counseling and guidance services.

In 1968, the College of Arts and Sciences at the University of Missouri at Kansas City initiated a program called "The Transitional Year" to help students overcome difficulties in making the transition from high school to college. The program consisted of academic counseling, tutoring, special freshmen English classes, developmental reading and/or mathematics classes, and financial assistance. Forty-six percent of the first transitional students earned a "C" average in the fall semester, with 54% above the University's probationary grade point average of 1.50. This was considered a success when compared to the performance of similar students not afforded the help of the transition program. Additionally, this program helped 54% of the transition students receive an average aid package of $1,800. The biggest success of the program was in the interpersonal relationships developed between the transition students and their fellow students who acted as tutors. The interaction of these two groups helped soften the hostility and stigma the transitional students felt at being singled out as academic risks. (University of Missouri -- Kansas City, 1969)

Morrison (1974) reported in a study at the State University of New York at Oswego that educationally disadvantaged students taking part in a program of tutorial and counseling services are more likely to succeed when placed in programs designed to meet their academic, financial, cultural, and social needs. In this study 20 males and 20 females were selected at random from each of three categories -- educationally disadvantaged students coming from the local community, other educationally disadvantaged students, and regularly admitted students. While a statistically significant difference was found between the college academic success of regularly admitted students and the educationally disadvantaged group, what this study also found was that there was no statistically significant difference between high school grade-point average and the persistence of students. The data suggested that the educationally disadvantaged students earned lower cumulative grades, had more failing grades, and earned credits at a slower pace than regular students; yet once the difference in high school grades were taken into account, the disadvantaged students persisted at a rate equal to the regularly admitted students. This suggested to Morrison that there are unidentified descriptors more valid than academic performance that, if uncovered, would provide a better explanation of why educationally disadvantaged students either drop out or persist. The study supports the argument that placing educationally disadvantaged students in a program designed to help them meet their academic, financial, cultural, and social needs improves the students' chances for success.

According to Suhr (1980), the University of California at Davis developed a program called the Special Transitional Enrichment Program (STEP) to help low-income and minority students adjust to the demands of a college curriculum. The goals of the STEP program were: 1) to help students strengthen their study skills, 2) to orient the students to the college by providing three weeks of on campus instruction prior to the Fall semester, and 3) to introduce the students to campus housing and to assist in the students' transition to campus life. The instructional units covered classes in reading; writing; study skills; mathematics; and for those requiring it, pre-chemistry. Tutors were available throughout the school year. The analysis suggests academic components did not have as important an effect on the students as other aspects of the program. It was felt by program observers that the close relationships developed during the summer by STEP students with counselors, faculty advisors, staff, and other students fostered an atmosphere conducive to heightened persistence once the faster pace of the long school year began. This "social bonding" is an effect that other studies have also identified as positively effecting retention.

The University of Iowa adopted a 40 item instrument developed at Clark University to replicate Clark's longitudinal study examining student retention in relation to a college's environment. Three factors were studied - the student's academic functioning, social functioning, and bonding in relation to the college setting. The study was initiated during the eleventh week of the second semester and used 459 freshmen at the University of Iowa. The results of the study closely paralleled those reported by Clark University. The new study at Iowa suggested social integration, academic adjustment, and plans to persist at the university were positively connected to an individual's ability to effectively form social bonds with the school. Furthermore, in the Iowa study, the ability of the student to form a strong social bond with the school was considered to be of greater importance than academic adjustment in determining rates of persistence by high-risk students. Unfortunately, while social bonding was identified in this study as an important factor in the retention of high-risk students, no approach as to how this social bonding might best be fostered was discussed.(Siryk, 1981)

Ball State University instituted what they termed an Academic Opportunity Program (AOP) in which all academically underprepared students are assumed to possess the potential to meet the demands of a college education if direction and assistance are given. An inventory of personality type, a study and reading skills survey, and a vocational preference inventory were administered to 658 high-risk entering freshmen to determine if alternative sets of descriptors would improve the accuracy of predicting academically underprepared student's future academic success and persistence. Student success was to be determined by grade point average and persistence for one year. In this study the Nelson Denny Reading Test, the Effective Study Test, the Myers-Briggs Type Indicator, and the Holland Vocational Preference Inventory were administered. The results suggest that the Myers-Briggs and Effective Study Tests helped increase the predictability of academically underprepared student's grade point averages by 11 percent, to a total of 67 percent of the total variable. The Nelson Denny and Holland Vocational instruments did not significantly add to the correlation. In summary, it was felt the obtained results were encouraging and the nonacademic aptitude and personality type surveys could increase the possibility of early identification of academically underprepared students. (Nisbet, 1982)

At St. Cloud University in Minnesota students graduating between the 33rd and 50th percentile of their high school classes are admitted to the university under the direction of the General Studies Program. These students are assigned a paired course tying their traditional academic coursework to a reading and study skills class. The goal is to help students integrate reading and study skills strategies with their academic class work. Regularly admitted students may also enroll in paired courses, and such courses may be taken for a two hour general education credit. The advantages identified in this support program are 1) enhanced transfer of learning between paired courses, 2) greater relevancy to the material taught in study skills when tied to information taught in the academic class, 3) increased motivation to develop study skills when they are tied to grades awarded in the academic class, and 4) coordination across the disciplines heightening faculty awareness of student needs. At the end of 1984, 385 students were asked to complete an anonymous questionnaire on the paired course program. Three hundred thirty-three students who took part in the questionnaire responded positively that the program had helped them and that they had greater access to teachers. Furthermore, paired course instruction was found to have positively affected grade point averages, self-concept, and retention rates for student participants.(Rauch, 1985)

Texas Tech Transition

Based on these findings in the literature, the Division of Continuing Education set out to develop a program directed toward attracting entering conditionally admitted students. The program would improve the skills of entering students in an attempt to allow these students to meet new, higher standards of admission at Texas Tech. The program would also attempt to increase the probability of a student succeeding at Texas Tech, which could possibly result in the student remaining at the University to complete undergraduate work and perhaps remain to enter one of the graduate programs. With its history of bringing people to the campus, the Division of Continuing Education seemed the best place for such a program to originate, as the program would initially be seen as an outreach aspect of the University not as a part of the traditional curriculum.

A steering committee chaired by the Associate Director of Continuing Education was established. The committee consisted of representation from Housing; the Library; Programs for Academic Support Services (PASS); Health, Physical Education and Recreation; Recreational Sports; the Department of Mathematics; the Department of English; Advanced Technological Learning Center; and the Counseling Center. The committee set to work securing facilities, planning student activities, developing the program schedule, preparing a budget, determining the curriculum, and developing methods of evaluation. Letters to parents of 2,000 students conditionally admitted to Texas Tech for the 1987 Fall term were mailed, as were letters to area high school counselors.

The program that emerged was an experience-based program which combined counseling, academic advisement, remedial programs in English and math, introduction to university procedures, career and vocational planning, study skills instruction, and library and computer use. The philosophical base was the belief that the University has an obligation to not only provide the opportunity for admission but also to enhance the probability of academic success to all students who might benefit from a college education; and the belief that personalized instruction, not only in academic subjects but also in study skills, career planning and university procedures, gives students greater opportunity to succeed.

The primary goal of the program was to convert conditionally admitted students to successful university students who continue to enroll until they graduate. Supporting objectives include: 1) helping the passive student become more involved in the learning process; 2) improving the student's English composition and basic math computation skills; 3) presenting an overview of services available to university students on the campus; 4) allowing the student to experience living independently on the university campus; and 5) encouraging the student to become involved in the social aspects of his/her university experience.

The fact there is a need for a program like Texas Tech Transition became apparent when parents and students began calling in their reservations. The program, designed for 30 students, filled in a matter of days, and a waiting list of 70 students developed in less that a week of the initial mailing. Permission to double the program was given, and 30 more students were accepted. The waiting list continued to grow.

The students who participated in Texas Tech Transition '87 came from a variety of high schools, large and small, urban and rural, and public and private. Their ranks in their graduating classes varied. One student was valedictorian of his class, yet he was academically underprepared. SAT scores, a major determinant in identifying conditionally-admitted students, also showed great variability.

The three-week experimental program offered students a better chance for success in their university experience. Thirty-six males and twenty-four females attended from Texas, California, Colorado, Missouri, and New Mexico.

Before arrival, the students had sent a personal letter to their Transition counselor telling about themselves and their academic history as well as their goals for the future. Upon arrival, individual intake interviews were held to help make the students feel welcome as individuals and also to clarify learning and program goals.

Transition staff consisted of four counselors, two males and two females, each responsible for 15 students; program director; program secretary; and three instructors (math, English, and study skills).

Instruction in Math 1300 was provided by an experienced freshman instructor. Each class was limited to 15 students, and the counselors were present with their groups to assist the instructor. Individualized instruction was strongly encouraged and quite possible with groups of this size.

English instruction was under the direction of a fulltime faculty member. The standards for the Transition students were the same as for students enrolled in regular English 1300 classes. Pre-tests and post-tests were given in both academic subject areas.

A variety of activities supplemented the students' academic instruction. The Education Interest Inventory, The Self-Directed Search, and the COPSystem Interest Inventory were administered to determine the student's major field of interest and corresponding career opportunities. To determine the student's reading comprehension percentiles and reading rates, the Nelson Denny Reading Comprehension Test was administered. The IPAT Culture Fair was given to determine the student's intelligence quotients (IQ). Students were advised on class scheduling and taught more effective use of individual learning styles. Transition students learned word processing at the University's

Advanced Technology Learning Center and became familiar with the University Library and its resources.

Study skills sessions developed students' note-taking, time management, and test-taking tactics. These skills were put to test in their classes and discussions concerning major points they should have noted in academic classes aided their skills competencies. Panel discussions focused on the services provided by the Offices of Legal Counsel, Career Planning and Placement, Testing and Evaluation, Financial Aid, the Registrar, and Student Life.

Students attended classes in regular academic buildings and became familiar with campus facilities. They were housed together in one dormitory with their counselors in the dorm to counsel them as needed.

Extracurricular activities added to the program. Pizza parties, a trip to the play "Texas" in Palo Duro Canyon, and a farewell dance aided the students' development of a support group of peers and a feeling of being a part of the University itself.

Three weeks into the Fall semester, Transition students met to evaluate their experiences and to schedule appointments for help with class schedules, roommates, financial matters, and personal concerns. Just prior to midterm, all of the students were requested to attend small group sessions. Individually or in groups of no more than five students, the participants were asked if they needed help in any particular subjects. Most of the requests for help were for help with math courses. As a result of the small group conversations, it became apparent the Transition students had become active in extra-curricular activities at the University. Many were involved in intramural sports; two were walk-ons for football and one was a walk-on for basketball. Several joined ROTC. They had taken it upon themselves to seek help in other areas of the University as well. They reached out to the PASS center, the Missouri Club (peer tutoring in the Math Department), the Advanced Technology Learning Center, the Writing Center, and the Microcomputer Lab.

At the end of the first semester, the mean grade point for 59 Transition students who attended Texas Tech in the fall was 1.76. This was slightly higher than the 1.73 mean GPA of a control group of conditionally-admitted students (33 males and 26 females) that did not attend the Transition program. Even though the Transition students faired slightly better than the control group, the success of the program is better measured in the students' feelings that the program gave them at head start, academically, socially, and emotionally, in their university experience. A program of this nature does much to dispel the image of the

University as a large impersonal institution having little recognition or regard for conditionally-admitted students who are academically underprepared for university work.

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A STUDY OF DETERRENTS TO PARTICIPATION IN EXTERNAL DEGREES

Lawrence H. Moore

Introduction

The external degree program, which became firmly established in the United States in the early 1970s, holds promise for many adults seeking degrees, primarily because of its' flexibility for acquiring college credit and reduced residency requirements. By 1982, over 60,000 graduates from external degree programs were estimated. Research conducted on external degree students has centered primarily on graduates of external degree programs. Few studies have focused on adults who entered and left external degree programs. Little is known about adults' reasons for entering and then discontinuing participation in degree programs designed to accommodate their lifestyles.

Research in adult developmental theory (Levinson, 1981) and in deterrents to participation in adult education (Darkenwald and Valentine, 1985) pointed to areas of concern for adminstrators, counselors, mentors, and instructors in external degrees. Do adults follow a hierarchy of development which includes, at some point, a college degree? Have adults who wished to pursue a college degree also discovered barriers which prevent their participation? Studies have reflected student and employer satisfaction with obtaining an external degree, and otherwise little is known about dropouts.

Studies of adults who partially participated in nontraditional programs have concluded that profiling dropouts from external degree programs were not possible (Potter, 1981) or that reasons for leaving an external degree program were as numerous as reasons for entering (Hobson, 1984). One category of deterrents to participation listed institutional, situational, and dispositional barrers (Cross, 1981). Likewise, Apps (1981) listed problems adults faced when returning to education. His listings included psychological or dispositional deterrents. Finally, Cross (1981) suggested a Chain-of-Response (COR) model to study the adult process for participating in higher education.

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To gain more understanding of the circumstances surrounding an adult decision to apply for admission to an external degree program and then change that decision by leaving the program, this study included 12 interviews with adults who applied for admission to an external degree program, but did not enroll, although 10 of the 12 had attended a 2 day orientation seminar. Each adult was interviewed from 2 to 4 hours. The interview results were compared to findings on deterrents to participation in adult education and to a Chain-of-Response model.

Findings and Conclusions

Deterrents to participation in external degree programs existed in a variety of factors also identified in other studies of adult learners (Apps, 1981; Cross, 1981; Feasley, 1983; and Darkenwald & Valentine, 1984). Case studies reflected portraits of individuals reporting a lack of self-confidence, unclear goals, expectations that award of a degree would be quick, or absence from formal learning for many years. Lack of self confidence was tied to earlier unsatisfactory performance in college studies. Expectations, for some, was based on a belief that life experience credits would be a quick and easy process. An extended absence from formal learning created a deterrent for some who were overwhelmed by other external degree student accomplishments or confessed apprehension when receiving homework assignments.

Additionally, two other contributing factors may have played a part in deterring participation. Adults originally from rural areas, exposed to practical education values, may have found these early impressions a deterrent to values associated with a college degree. If learning does not yield immediate application to self improvement or work, that learning held no value. Ten of the interviewees represented first generation entry to higher education. This first entry, coupled with a desire for practical learning which developed in rural beginnings, may have proved to be a deterrent which had developed years before external degrees existed. Most of the interviewees had beginnings on farms or in small rural towns.

For some adults, deterrents to participation in external degree programs existed in combinations such as having a lack of self-confidence and having been away from formal learning for a number of years. When these two deterrents were coupled with the additional experience of failing grades in early college studies deterrents to participation became a three-fold complex issue. High school performance and college transcripts may prove accurate indicators of potential success in external degree programs. Absence from formal learning may deserve attention in early stages of advisement.

One might explore the existence of new kinds of institutional barriers. Adults who have demonstrated productive and successful lives may not understand a need for mathematics or science courses. Most degree programs require a general education core which includes content that adults have outgrown or surpassed.

Comparisons of age groups suggested differences in reasons for seeking a degree or for deciding not to pursue an external degree. A college degree represented a goal with varied purposes for those who were 30, 40, 45, 50, or 62 years of age. Transitional and developmental tasks described in Levinson's (1978) study paralleled the tasks that adults in this study undertook as change activites. Flurries of change and exploration appeared in their life reports during ages 17-22. This was followed by a structure building phase which paralleled Levinson's Entering the Adult World (22-28). Age 30 Transition activities were reported by most of the subjects during ages 28 - 33. Likewise, a Settling Down Period (33-40) appeared, followed by Mid-Life Transitions (40-45) undertaken by adults in those age brackets. Finally, at age 50, a marked redevelopment of earlier goals appeared. Periods of transitions and development followed closely those tasks defined by Levinson in his study of males. This study included males and females. The number, 12, was not sufficient to make a strong case that these tasks exist for all adults. The findings did, however, appear to support the concept that adults undertook tasks or investigated them in uniform periods of transition or development.

The external degree program does not satisfy expectations of many adults, if the case studies in this report represented most adults who applied for admission and then declined further participation. Some adults required more individual counseling and assistance than this external degree program offered.

Deterrents existed, for the most part, under the rubric of dispositional barriers (Cross, 1981). Individual attitude, as a dispositional barrier, seemed tied to earlier poor academic performance, expectations of quick degree completion, feelings of insecurity or inferiority by having been absent from formal learning for an extended length of time, and unclear academic goals.

Preliminary information advertising external degrees, such as newspaper stories, brochures, and booklets received by potential external degree students, may have implied promises of a degree which requires little preparation or study. Expectations become heightened, only to realize a sense of frustration or discouragement when more accurate information was obtained.

Conducting a seminar as a requirement for entry into external degree programs served a purpose of identifying adults who may require help or redirection. Without such a returning group experience, many adults will gain admission to external degrees only to realize after considerable expense in time, effort, and funds, that the degree is not the best vehicle for their pursuit of higher learning.

Implications and Recommendations

Surely administrators, instructors, and counselors seek to improve external degree programs. Improvement involves a more economical use of time for and with degree seekers. Identifying adults who demonstrate a lack of self confidence before beginning studies, or advising students to seek traditional learning instead of external or distance learning could be improvements. Certainly administrators and staff expend time and effort evaluating transcripts, establishing files, and corresponding with applicants. Much of this time could be saved if advance information were accurate and did not create false expectations with adults who are not willing to devote effort in earning a degree. Entry procedures could be developed which guide students from traditional learning methods to independent learning in their pursuit of a college degree. A strategy for improving adult student entry into external degrees is needed.

Perhaps of greater importance were the implications suggested by poor academic performance during early years of transition. Do institutions of higher education create situations in learning which lead to lack of self confidence, poor self-esteem, and distrust of higher education? Are these adults solely to blame for poor grades? Or do advisors, instructors, and administrators need to rethink the process of higher education and its ramifications? A nation which prides itself on educational accomplishments might need to look at the damage which results from grades of failure and poor achievement. Certainly this relatively small group of adults which poor grades have not gone on outside of higher education to fail. All had contributed to society in their work, families, and roles. Their reported failures were in higher education.

The interviews of the 12 adults who initiated actions to gain admission to an external degree program revealed that reasons for declining further participation are complex and varied. A follow up of external degree seeking adults who later decline participation provides valuable insights into a need for program refinement. For example, literature describing external degrees may create unrealistic expectations for adults who have been away from higher learning. A profile of adults who will require more assistance than that which is offered can be developed to identify students in need. Entry procedures could be developed which assist reentry to degree programs rather than deter participation in higher education.

Assistance in self evaluation, reassurance, clarification of goals, identification of learning options, and returning to traditional classrooms may be needed by adults such as the twelve in this study. As mentioned by Feasley (1981) in his discussion of distance learning, adults who attended an external degree seminar may have learned that their educational needs would not be met by nontraditional methods. They might be better advised to seek traditional courses. Transcripts reflecting academic probation, suspension, or failing grades may indicate a need for counseling and identification of individual strategies which promise academic success.

Adult students represent a voting consumer who, hopefully, will entertain more positive images of higher education as a result of contact through external degree exploration. For state supported institutions of higher education image is becoming an issue. Fair treatment of these interested adults calls for sincere evaluation of potential to learn independently, advice to enter or seek other options, and assistance with self-concepts. Ultimately, adults entering external degrees should reflect abilities to design their own learning as they successfully exit programs. That success may translate into greater citizen support of higher education.

Recommendations for Further Study

The research by Darkenwald and Valentine (1985) on deterrents to participation in adult education provided guidance which could lead to the development of instruments to identify adults who should be advised against enrollment in an external degree or assisted in making a transition from a dependent learner to a self directed adult learner. Incorporating the COR model (Cross, 1981) into such an instrument would also measure a sequence from self evaluation to participation as it pertains to external degrees. Ideally, an instrument which incorporates measures of earlier success or failure in higher education, clarification of degree goals, levels of self confidence, attitudes toward higher education, prior experience with distance learning methods, and personal expectations could be developed to identify adults who may require more than a seminar in developing their degree plans.

Adults represent a growing number in colleges and universities. That number will demand a greater exploration and meeting of their needs. More remains to be learned about adult developmental tasks with regard to higher education. It would surely be important to know what developmental task an older student is exploring, and how classes and degrees fit the task.

This study represented a beginning inquiry into deterrents to participation in external degree programs. Evaluation of external degree seekers should include those who decide to seek admission only to decline entry as well as those who enroll and complete a degree program. Much remains to be learned from adults who believed external degree programs fit their circumstances only to discover otherwise.

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CAREER COUNSELING FOR THE RETURNING ADULT STUDENT

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Abstract

This paper will provide an overview of an appropriate career planning process for returning adults and methods dealing with their career issues and concerns. Individual career counseling techniques will be presented as well as a credit course and a workshop format. In addition, some time will be spent on comparing the older adult with the traditional-aged student engaged in the career development process showing both similarities and differences.

INTRODUCTION

Adults (people 25 and older, who have had a gap in their pursuit of higher education) have been returning to college in ever increasing numbers. This is not a new trend but one that has been occurring since World War II. By 1990 it is predicted that almost half of the projected enrollment in colleges will be 25 and older (Dearman and Plisko, 1982). The concept of lifelong learning can be traced back to Socrates and Plato and through the intervening centuries to the present day (Harris and Grede, 1977). Lifelong learning has now become a by-word in colleges, particularly those trying to attract adult learners. The shift more recently has been toward career-oriented programs beginning in the 1950's at the community colleges (Harris and Grede, 1977). Adults returning, desire both lifelong learning as well as career-oriented programs and are often the ideal college student.

There are an estimated 20 million adults in American in some type of career transition (Aslanian and Brickell, 1980). Adults can be trying to obtain a job; adapt to a new job; advance in a career; trying to increase their income or find more interesting work; taking early retirement and want a second career. In their personal lives they could be reacting to loss of a spouse, acquiring a new spouse and children, becoming a grandparent, or other familial changes (Johnson, 1986).

The linear life-stage theory and developmental tasks based on age (Havighurst, 1972) may no longer describe the adult population. That is, career planning starts at 18, plans are revised at age 35, career is maintained or changed from 45-65, and retirement is at age 65. This sequential plan seems to apply less and less to today's adult and has been replaced by a "blended life plan that involves moving in and out of education, work and retirement at various times in one's life" (Johnson, 1986). Schlossberg believes that there are four theoretical perspectives in which to view adult career development: cultural,

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developmental, transitional, and life-span. There are different practices suggested by each of these but the significant point is that adults vary considerably and an eclectic approach utilizing strategies from each perspective is needed.

Thus, before developing appropriate career planning programs for returning adults, several dimensions need to be considered. First, what kind of career and personal transitions are they experiencing or their lifestyle at present. Secondly, what kind of future goals or the ideal lifestyle they would like to attain. Finally, their level of self-awareness and knowledge of career options needs to be assessed.

Adults Seeking Career Counseling

Frequently, when adults seek career counseling they may want some career counseling help in self-assessment and decision-making but "their primary interest according to Arbeiter's study (1976), is in obtaining occupational information such as job listings or locations of job training programs." (Johnson 1986) This need for a job is a very real necessity as time and money are usually in short supply. Often, these adults are relatively unsophisticated as to what is available and how to go about making themselves marketable.

This approach will often frustrate career counselors unless they are prepared for it. Many adults do not have "it all together", and they may press for the black and white facts of the current job outlook. Most, however, can be convinced that it is at least equally important to find a career that reflects their interests and abilities. A useful tactic is to point out that the job market is competitive with few exceptions. Thus, if they are to compete well, it needs to be in areas of interest and ability. Of course, there can be several areas and the next step is to find ones that fit their lifestyle considering factors such as time, money, family responsibilities, often geographic immobility, as well as the job outlook.

There will also be adults who have some very clear ideas of what they want and need help in exploring these ideas further. The counseling provided will vary considerably with each adult because of their varying needs and stages of adult career development. However, there is a general approach that can be taken with each adult student.

Individual Career Counseling

"Horan (1979) concluded that the main phases of counseling could be labelled (1) assessment, (2) inter-vention, and (3) evaluation." (Kinnier, and Krumboltz, 1984). The assessment stage is very important to determine the current lifestyle concerns, career and personal transitions, and future goals or desired lifestyles. The intervention stage involves suggesting steps that the student can take to enhance her/his situation. The evaluation is usually of an informal nature.

In this assessment stage, a career counseling interview begins with finding out what the person already brings to the situation. It is useful to have an interview form to obtain and keep information on each adult student (Maurer, Poole, 1987). A good first question is "What career (or major or both) ideas do you have?" With adults they will usually automatically bring up whatever career and personal transitions they are experiencing or their current lifestyle. This information needs to be obtained in order for the career counselor to make appropriate suggestions that tailor the individual needs of the adult. Sometimes too, an adult sees themselves as too limited by their circumstances and the counselor needs to help them see beyond their situation. Most adults when they first return are fearful they can't compete with the younger students and underestimate their abilities (Waltz and Benjamin, 1980).

Career counseling before adults have started back or in the first semester is often not yet relevant for them even though they frequently seek it to justify returning to school. The counselor needs to do more counseling (listening to the concerns of the adult, providing reassurance) than provide information even though information is what is often being asked for. As is frequently the case in counseling situations, what is being stated is not necessarily the problem; and the counselor must listen carefully to understand what is needed. If information is being asked for, it should be provided but time must also be spent to see if there are other needs not being stated. Many adults do not ask for help easily and it may be hard to admit that they don't know something. Generally, though, if you follow their lead, they will trust you to tell you their fears.

The intervention stage will vary according to where the adult is, their self awareness and knowledge of career options. The following are examples of the interventions used according to where the adult is in the career development process.

If the adult seems to be lacking knowledge about their interests, abilities, and how these relate to career, after an initial interview, they are referred to DISCOVER a computerized guidance approach. The newest edition now includes the units that were once in a separate edition for adults. There is an interest, abilities, values and experience inventory which needs to be taken to provide suggestions about careers. There is also a section on "Coping with Transitions" which is particularly useful for adults. Interest inventories also such as the Strong-Campbell and Kuder can be used but DISCOVER, if available, provides a much wider range of information. A word of caution; some adults are reluctant at first to use the computer because of lack of experience. They may need estra reassurance and instruction in order for this to be a beneficial experience.

Once the person has carreer ideas (often the adult is in this stage), the next intervention is to explore these ideas. Reading about the career areas, utilizing the career library is suggested, as well as interviewing people in the field of interest. Additional exploration is also recommended such as volunteer or part-time work, an internship type experience or cooperative education. Adults usually respond well to these ideas and pursue them readily. Their level of motivation is very impressive.

Evaluation is often subjective and is generally determined by the reaction the adult has to the suggestions. Generally, they will tell you by their comments if you have been helpful. They will often return for further help, refer their friends, or write a note of thanks.

Workshop/Credit Course Format

Adult learning theory needs to be considered when designing a credit course or workshop. It should also be the foundation for individual career counseling or any activity designated for adults. Andragogy is the term that has replaced pedagogy (literally meaning the teaching of children) and

> Knowles (1978) has identified four major assumptions that undergird andragogical theory, based on differences between adults and children; (a) self-concept: a move toward self-direction, the need to be perceived by others as self-directing; (b) experience: definition of who one is by one's experiences, the need to utilize life experiences as resources for learning; (c) readiness to learn: wanting to learn things one needs to learn vs. what one ought to learn, the relationship between adult developmental tasks and the need to learn new competencies, and (d) orientation to learning: immediacy of application of what one learns, problem-centered learning relevant to ongoing life roles and concerns. (Waltz and Benjamin, p. 10, 1980)

The instructor needs to be a group leader facilitating activities and group discussion. The skills obtained in a group counseling course are most useful for this type of class or workshop. The goal is to utilize adult learning theory aiding the student in becoming self-directed, using life experiences as a resource, and helping them learn a process of decision-making that can be applied to their life roles and concerns.

The objectives for the credit course and non-credit workshop would be the same. They are a) to provide an opportunity for participants to develop ideal goals and to realistically assess their interests, skills, abilities and options and b) utilizing the information obtained about ideal goals and from self-assessment, participants will determine future directions. The activities will vary if it is a credit course or workshop. For both, the sessions would include 1) developing an ideal lifestyle and goals, 2) assessing current or real lifestyle (interests, skills and abilities) and 3) developing a project to research ideal goals and to see if these goals can be integrated into current or real lifestyles. The research project would involve reading about the career area, interviewing a person in the field, developing plans to try it out on a limited basis, and presenting the findings to the class. The format is always a group discussion. The credit course requires a written term paper for the research project but the workshop does not.

The first step of developing an ideal lifestyle sets the tone for the course. Students are encouraged to develop a lifestyle with no holds barred; with nothing holding them back, not time, money, energy, intelligence, or anything they see as limiting. The next step is to explore their real lifestyles or their interests, abilities, values, goals and their lifestyle at present. This is done by self-reports supplemented by interest surveys (Kuder, Strong, Career Decision-Making System or DISCOVER). The goal is to try to integrate the ideal and real lifestyle by means of exploration of the ideal lifestyle. This process is accomplished by reading about the area (career literature, or other books about people having the desired lifestyle); interviewing people with the desired lifestyle; and developing plans to try out this lifestyle on a limited basis (volunteer or part-time work; internship-type course; or cooperative education).

Returning Adults Compared with Traditional Aged Students

Apps (1981) feels that returning students differ from traditional students in several important ways.

> The major areas of difference are (1) life experience - the returning students bring a wealth of experience to the classroom; (2) motivation - the returning students are highly motivated, with this motivation often related to a specific goal for attending college; (3) academic behavior - returning students often have problems adjusting to university life, including learning academic procedures, rusty study skills, inability to concentrate, and adjusting to problems associated with unlearning; and (4) other problems - unrealistic goals, poor self-image, social-familial problems, and sometimes an excessive practical orientation. (p. 51)

However, the traditional-aged student can often have similar characteristics, particularly those regarding (3) academic behavior and (4) other problems, without the counterbalance of life experience and motivation. Both groups have learned to believe that their life experience is not valuable or applicable to college-level learning. Fortunately, for returning adults, many colleges do have credit for life experience programs which help verify the learning they already have. Experiential education programs (cooperative education, internships, etc.) can be utilized by both groups to develop more life experience particularly as it applies to their career goals.

Another dimension to consider in this comparison is the college environment. "The student stereotype is one of a young adult with limited maturity and life experience. Students are viewed and treated as passive learners dependent on the knowledge, judgment, and direction of experts about what is important to learn and how to learn it." (Keierleber and Sundal-Hansen, p. 254) The university setting often fosters dependence which is not healthy for any student but particularly not for returning adults who have usually been functioning quite independently before returning to college. Ideally, the goal of higher education should be to promote independence; mature, informed decision-making; and andragogy. Traditional-aged students should not be subject to pedagogy either as they are not children, they are young adults.

Adult learning theory and adult career development theory provide a better framework for working with young adults. They often need to know about the lifestyle changes they are likely to encounter (life-span development, etc.) so they can make more realistic career plans that allow for change. The concept of lifestyle needs to be explained although many young adults already understand this idea and are planning for a particular lifestyle. Sometimes their conception of lifestyle can be unrealistic and they may need further exploration of their ideas.

In most instances, the returning adult and the young adult have more in common than is first readily apparent. They have much to learn from each other. The returning adult can share the life experience she/he has had; career, marriage and child-rearing information. The young adult can help the returning adult understand the academic system better and the returning adult's own children who might be of similar age. Young adults often learn how to relate better to their parents as a result of a friendship with an older student.

In terms of career counseling, similar methods can be used. It is equally important with a young adult to begin with her/his current lifestyle (abilities, interests, values, work experience) and to uncover their ideal lifestyle. They will usually not have as much life experience or be going through as much transition as an adult student, yet it is essential to have an understanding of what they do bring to the situation. Under optimal circumstances, a career/life planning course would include both groups as there is so much that can be learned and shared. Returning adults have often achieved goals that young adults are struggling to articulate. The older student can be a role-model and possibly a mentor for the younger student. Young adults can often help the returning student become more flexible about their values and even how to survive better academically (less stressfully). Adults are usually excellent students but they often have not learned that they don't have to do every assignment in minute detail. The traditional-aged student can often teach them what is really necessary to do. It is important to help facilitate a better understanding between these two groups as they are potentially such valuable resources for each other and for the college.

Conclusion

Each returning adult student and traditional-aged student has a unique history and lifestyle. Adult learning theory and adult career development are essential to understand in order to provide appropriate career counseling services to returning adults and young adults. It is important to recognize both similarities and differences of these two groups while keeping in mind that each individual is unique. Similar methodology will work with both groups as long as the central focus is lifestyle, both current and future. Kierleber and Sundal-Hansen (1986) believe that career service professionals can provide leadership for a university of the future where the terms "traditional" and "non-traditional" will not exist. Career counselors are in an excellent position to facilitate interaction between these two groups and help eradicate unnecessary distinctions and to provide services essential to both returning adults and young adults.

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LIBRARY SERVICES FOR EXTENDED CAMPUS PROGRAMS: THE CENTRAL MICHIGAN UNIVERSITY MODEL

Virginia Witucke

Introduction

Key West, Florida... Minot Air Force Base, North Dakota... Fort Hamilton, Brooklyn, New York... Edmonton, Alberta... Joplin, Missouri... The Pentagon... Longmont, Colorado... Aberdeen Proving Ground, Maryland... These are some of the sites at which graduate degree programs are offered by Central Michigan University, under the aegis of the Institute for Personal and Career Development (IPCD). The program began in the early seventies, when officials at Wurtsmith Air Force Base in Oscoda, Michigan explored with Central Michigan staff the possibility of providing courses for pilots, who needed advanced degrees for promotion. Their flying schedules precluded attending traditional courses. A weekend schedule was devised, with classes being offered in a compressed format, so that a course could be completed within about a month. The success of this experiment led to a proliferation of sites and programs. There are currently about 8,000 active IPCD students.

Most programs lead to the Master of Science in Administration; concentrations are available in health care, public, security, and general administration. Elsewhere in the Institute, undergraduate programs, independent study courses, and education classes are offered. MSA graduate courses are given at more than 50 centers across the country and abroad; many centers are on military installations. Central Michigan University has an office at each site, with a center representative serving as local liaison. Central arranges for classrooms and provides instructors, many of whom must travel to teach their courses. A variety of scheduling patterns is available, but most courses are offered on some kind of a compressed format and last between one month and nine weeks. The Atlantic Region, serving Northern Virginia and points north, has five fulltime faculty members. Faculty advisement is provided at all centers.

The administration of the Institute for Personal and Career Development has always been concerned for the quality of the courses, and that neither faculty nor students be disadvantaged by being off-campus. One clear implication of this is the necessity of providing library service. Thus an Off-Campus Library Services (OCLS) component was developed that is still evolving, since the first librarian was hired in May of 1976.

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A recently approved policy statement says:

> The mission of Off-Campus Library Services is to support the learning and teaching activities of students and faculty . . . through a system of quality library services; and to facilitate the acquisition of information gathering skills which can contribute to strong academic performance, increased job related responsibilities and self-directed lifelong learning.

The basic services consist of reference assistance provided by regional librarians, and a document delivery service on campus. There also is a great reliance on local libraries in which students can begin their information searches. Staffing consists of regional librarians, one of whom was recently appointed manager, a bibliographic specialist, an office manager, clerks, and student assistants. The manager reports to the campus library's Associate Director for Systems and Access.

Regional Librarians

There are six librarians. The manager, the instructional resources librarian, and a regional librarian have offices in Park Library on the Mt. Pleasant campus. One regional librarian is headquartered in the Detroit area, and two share an office in the IPCD regional headquarters in Fairfax, Virginia. One (the author) is responsible for service to the Atlantic Region and the other librarian serves the South East and Ohio.

Telephone reference assistance is an important aspect of service. Students, who may call collect or on a tollfree line, typically request help with topics for course assignments. Whenever possible, students are referred to specific periodical indexes and told where these indexes can be found locally. Thus someone from Andrews Air Force Base, looking for articles on military ethics, would be directed to look under **Ethics** in the Air University Library Index to Military Periodicals, which is available at the base library. Telephone number, location, and hours for the library could be given, if needed. Other suggestions for a search strategy might be made. For example, a student doing an assignment on starting a small business would be referred to the topics **Small business** and **New business enterprises** in Business Periodical Index, and to public libraries for books (this topic is better covered in public than academic libraries); the address and telephone number of a local Small Business Administration field office might be given. Since starting a small business is a popular topic, a research guide has been developed, which would be sent to the student. A guide to local libraries would probably be included in the mailing.

When a topic is not accessible in traditional sources, librarians take over the search. Sometimes this will mean calling campus, where there is a large collection of indexes. More often, a computer search is made. Primary reasons for searching online are the need for articles on terms/concepts that do not show up in reasonably accessible print indexes (recent examples are nominal group technique, overachievers, and downsizing), articles relating two or more concepts (e.g., quality circles in an ADP environment, selecting a microcomputer in terms of MIS software available, effect of defense spending on the economy), and very current topics (e.g., the status of an impending merger, information on Robert Bork a few weeks after his nomination to the Supreme Court).

Bibliographies are routinely prepared on campus for core courses, and available for some others. Librarians prepare bibliographies on perennially popular topics, such as persuasion and performance appraisal. Bibliographies are requested from other sources, such as the National Library of Medicine, Library of Congress, and the Public Relations Society of America; staff members pick up lists when visiting libraries. Copies of selected online searches are kept. Frequently, this bibliography collection provides useful references for incoming requests.

Students sometimes ask simple reference questions, which tend to be answered from such sources as United States Government Manual and Encyclopedia of Associations. Occasionally librarians are asked to track down the citation for a vaguely remembered article. "John Wayne: Five Negotiating Styles" in Harvard Business Review turned out to be "Negotiators Abroad--Don't Shoot From the Hip." Librarians are regularly asked for interpretation of style manuals, and for clarification of how the Off-Campus Library Services program works.

Faculty reference requests are usually for bibliographic information, publishers' telephone numbers and addresses, and topic searches.

Library (bibliographic) instruction is also part of the OCLS librarians' role, motivated by both students' short-term assignment needs and the importance of information gathering skills as part of lifelong learning. Because of the distance and dispersion of students, much instruction takes the form of printed materials. The CMU Library Guide, provided to all students, outlines basic library information (classification, catalogs), periodical indexes and abstracting services, basic reference tools, government documents, and specialized sources relating to corporations, education, and health care.

One to two page research guides have been prepared for most courses, outlining basic ways to gather information for a particular class. These guides are distributed by center representatives. Special purpose aids are sent out as needed; examples are researching an industry, and finding materials in education. Some of the telephone conversations with students include explanations (de facto tutorials) on how to find and use specific library materials.

The generous funding of the Off-Campus Library Services program by the Institute provides support for librarians to travel to the centers, and visit classes; much of this time is devoted to library instruction. A special effort is made to get to the orientation sessions for cohorts, which are self-contained degree programs in which a group of students move together through a pre-arranged combination of courses. There has been some experimentation with offering instructional workshops on a voluntary attendance basis.

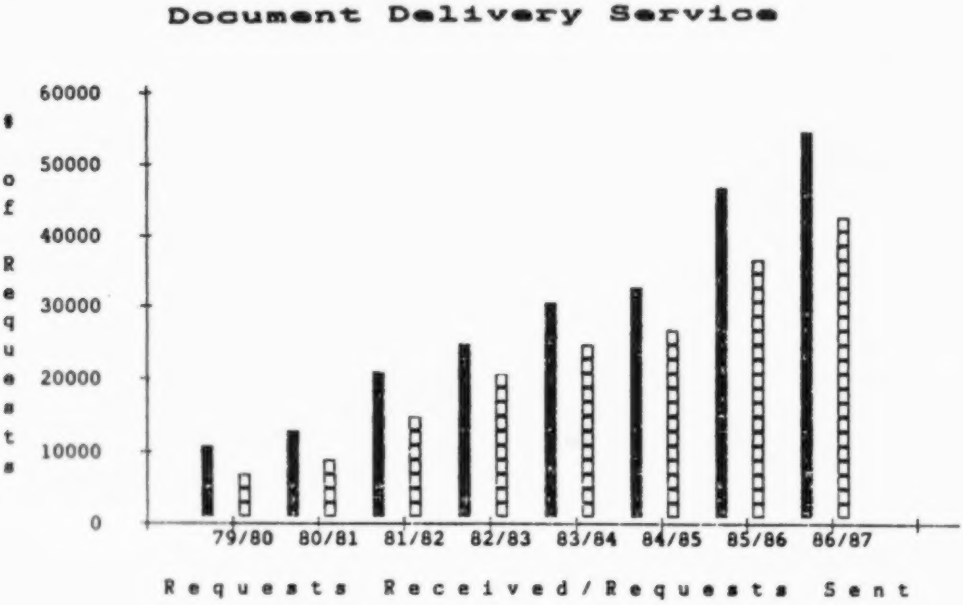
Most class visits are initiated by the librarian. However, instructors are encouraged to invite the librarian to come to class to help students develop information gathering skills. This is highly desirable, as there is more class time available for presentation, students have an immediate need for the skills, and the faculty member is clearly communicating the importance of library use and competence.

A new course, approved but not yet offered, includes time for a brief library module. Plans call for this module to include a discussion of information and its dissemination, generic and specific information sources, information gathering strategies, and evaluation of materials. It is hoped that the preparation of a bibliography, tied to a major course project, would enhance and extend learning, as well as being useful in its own right.

Document Delivery Service

This office is housed in Park Library on the Central Michigan University campus. Students, faculty, and staff may call this service via a tollfree number and request up to 15 items per week. Materials available are journal articles, microfiche, books, and government documents. Only the latter two need be returned; paying library postage on borrowed materials is the only direct expense to those who use library services. Three and a half permanent employees staff the document delivery service, supported by about 180 hours weekly of student assistance. Calls are taken whenever the library is open, which is over 100 hours a week during the regular terms. A request form is filled out for each item, with student information and bibliographic citation. Although requesters are expected to order specific items, an exception is made in the case of books. Since the CMU library holdings are not yet online, the bibliographic specialist will search for books by a given author or on a specific topic (e.g., budget process, historical background of the Sixteenth Amendment). Multiple copies of style manuals are available for student loan.

Items requested are gathered and processsed. The standard of service (achieved consistently except during occasional peak periods) is a 24-hour turnaround from the time the request is received. Materials are mailed first class, to speed delivery. In the 1986-87 school year, the fill rate was 82.5% for journal article requests and 63.3% for books; overall rate was 80.5%. Nearly 50,000 articles and 5800 books were requested. There is a limited call for fiche and government documents, in part due to lack of student familiarity with these forms. The graph below shows the growth of demands on the Document Delivery Service, compared to the ability to fill requests.


Document Delivery Service

Faculty Service

In addition to the standard services available to IPCD personnel, instructional assistance is offered to faculty. An examination textbook loan collection is being developed with the cooperation of many publishers, so that instructors may preview and compare possible texts. Faculty who want to consider the use of audiovisual materials in class are referred to an on-campus instructional resources specialist who will compile a list of sources and their distributors. Production of instructional materials can be arranged. Assistance in identifying case study material is available.

The bibliographic specialist will request copyright permission when faculty members have articles or book chapters they want distributed to students. In addition to publicizing this service to faculty, librarians and center representatives are alert for potential copyright violations and make suitable alternative arrangements.

On occasion, course materials have been placed on reserve in local libraries; class library orientations have also been arranged. Course bibliographies and research guides will be prepared on request, in addition to the many course-related materials already available. Files of course syllabi are available for consultation.

The Institute publishes a quarterly Faculty Update. A portion of the space is devoted to the Off-Campus Library Services. Recent articles have featured the textbook loan collection, copyright compliance, a case study service, and The American Journal of Distance Education.

Local Libraries

The resources of local libraries are as vital to students off-campus as those on-campus. Here students can consult periodical indexes, get background information on a topic, determine suitable terminology, check the library catalog for leads, and use specialized reference books. Assignment topics can be clarified, broadened, narrowed, or confirmed, and a bibliography for the assignment compiled. Since there is so much reliance on local institutions, CMU librarians visit libraries near centers. Results are written up to refer to when conferring with students. Local library guides for students are prepared for most sites. Librarians call local libraries for information on resources, and sometimes search OCLC, a large bibliographic database, for libraries where students may find needed items.

Since many of the centers are on military installations, particular heed is paid to libraries on the base or post. Librarians at these sites have shown themselves to be very receptive to Central Michigan University students. CMU donates subscriptions to indexes (especially Business Periodicals Index) and other reference sources in many of these libraries, for our students' benefit and as a courtesy to the library whose resources Central students are using.

Marketing the Program

All libraries must aggressively promote their services. The IPCD Off-Campus Library Services program has even more need to do so. Many of the marketing methods have already been mentioned: the CMU Library Guide, course handouts, site visits. Students admitted to the MSA program receive a packet from the campus library, with a welcoming letter and materials describing the program; new faculty members also receive library information packets. Some of the Regional Librarians follow up with a letter to faculty. One of the most useful single promotional pieces is a bookmark, with the Regional Librarian's phone number on one side and that of the document delivery service on the other.

The local Central Michigan liaison is the center representative. Keeping in close communication with the representatives is vital, because these people can be influential in publicizing the OCLS formally (e.g., through local newsletters, distribution of research guides) and informally (personal recommendation). Faculty advisors can play a crucial role in telling prospective and new students about library services. Supplies of library handouts are available at each center.

Posters are prepared and distributed to IPCD sites. One, showing a telephone, is captioned "We'll get you off the hook--call the Library." Another has a telephone, with the base opened up like a toy chest, and books spilling out: "Information will come to you with a telephone call to CMU Libraries." A third has a mailbox in the foreground, with the accompanying line, "We deliver." It would be very unusual to go to a center and not see overt reminders of the library program.

The Institute for Personal and Career Development frequently sponsors regional meetings of various sorts, such as faculty development workshops, advisors' meetings, and center representatives' meetings. Librarians attend, and often make presentations describing the library program. Personal contacts with staff and faculty are actively sought.

The library section of the faculty handbook is being revised to reflect more accurately the current service; the center representatives' handbook should be next. National, regional, and center newsletters are sometimes used to publicize the library program.

The IPCD administrators are extremely supportive of Off-Campus Library Services, and frequently cite the program. This visibility is a distinct asset. Dr. Robert Trullinger, the director, regards librarians as an integral part of the staff, and regularly appoints librarians to IPCD committees.

Other Program Aspects

With librarians working at three separate sites (two of which are not attached to libraries), opportunities to work collegially are vital. Two or three library staff meetings a year are scheduled on campus. Librarians also participate in Institute-wide meetings, which provide additional occasions to meet with each other. Daily phone calls are made between campus and regional offices to seek help or share information. Memos, handouts, and other items are regularly mailed between sites. A telefax machine makes it possible to expedite the exchange of printed information.

Advice and counsel is provided by the IPCD Library Program Steering Committee. Members are the Institute's Director and Associate Director for Academic Affairs, plus the University Library's Director and Associate Director. The OCLS Manager chairs the group.

About the same percentage of the IPCD budget goes toward library services as does the on-campus budget. Although most Institute funds are used for services, a portion of the library budget is allocated for materials, some of which are donated to cooperating libraries. Most money is used for books and periodical subscriptions for CMU's Park Library. Regional librarians are responsible for recommending purchases in selected subject fields. Items requested that could not be supplied by CMU are considered for purchase.

Central Michigan University began sponsoring Off-Campus Library Services Conferences in 1982. The objectives (Lessin, 1982, p. 2) were:

> 1) to provide a forum where practitioners could gather to exchange ideas, concerns, perspectives, and research, and 2) to bring together at the national level for the first time those individuals who must work with one another to create and develop successful library programs for off-campus constituents.

Invited speakers, participant papers (chosen from proposals submitted), and opportunities for informal interaction have characterized all three conferences. The fourth will be held in Charleston in October of 1988. Proceedings of the first three conferences have been published.

The Future

The basic plan for provision of off-campus library service is sound, and the system is working effectively. However, there is no question of complacency. (One of the advantages of working in a nontraditional program is that there are no ruts in which to fall.) The staff is concerned with greater efficiency, including automation of the paper work involved in the document delivery service. Policies and procedures are being discussed and formalized. Marketing efforts require examination; clearly, not all IPCD participants are using services available to them.

The crucial nature of faculty was recognized by the addition in 1987 of an instructional resources librarian. A computer software examination collection, similar to the textbook service, is in the planning stages. A collection of frequently requested videotapes is likely to be developed, to ensure convenient availability for class use.

Access to additional online databases will continue to be explored. Once the campus library's holdings are available online, efforts will be made to tie IPCD students into this system. End-user searching (i.e., by patrons, rather than librarians) of commercial databases has been requested by some students, and may play a role in the future. The needs of distance learners and instructors make it particularly important that OCLS staff keep up with technological innovation in information access and delivery.

Because of the heavy demands of the Institute on the main library, more resources need to be added to that collection. This requires a plan that will strike a balance between serials and monographs, short-term and long-term needs, and campus and Institute budgets. The small, highly select reference collections in the regional offices need to be expanded so that more students can receive immediate responses to their questions.

Bibliographic instruction is a major focus, with librarians seeking to define more precisely what should be the goals of instruction, and exploring ideas for teaching and learning. The library module for the new MSA 600 course has been outlined, and is being developed. The staff is considering producing videotapes that students or instructors can use whenever needed. A tape might illustrate a sample literature search, or introduce the conventions of periodical indexes, with special reference to those most heavily used in the program.

A more extensive system of measurement and evaluation must be developed, so that staff has a clear and objective view of program strengths and weaknesses. Tied to this is a need for longer term planning. Staffing needs will change as new programs are added by the Institute. New approaches to delivery of services will be required if current plans to move into international programs materialize. The only certain thing is that the Off-Campus Library Services program in five years will be recognizable in outline, but have many unfamiliar details: new processes and procedures, new services, new patron groups, greater use of automation. Some current program elements may have disappeared, having lost their usefulness.

The Institute for Personal and Career Development's Off-Campus Library Services has a solid reputation among students, faculty, and staff. The combination of factors making it so include the size and professionalism of staff, the aggressive marketing efforts, the support provided by the administration, the flexibility inherent in the program, and the highly focused nature of the Institute. These same variables will keep the program strong and responsive.

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IMPERATIVE: TEACHING COLLEGE STUDENTS HOW TO THINK AND LEARN
"An Approach to Developing an Active Teacher - Learner Team"

Chalmers Archer, Jr.,
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Early Classroom Experiences

Early college experiences for college students are the most influential parts of their learning processes. They play a vital role in helping learners shape first and lasting views, become motivated and develop sound aspirations. Education, at the early classroom level, broadens students understanding of the world, their heritage, nature, and add means to fulfilled learning potentials.

College scholars must learn the importance of thoughtful emphasis at an early stage. Teachers of college students must work hard initially, on helping young scholars learn to use their minds well. The aim ought not to be for recitation, but for insight. Teaching must not become an end in itself -- not only for preparation -- but means to thinking and to creativity. The secret is to better teach students to think and learn. This is true for students in general, but is especially true where college students are concerned.

An Introduction to a Teacher-Learner Concept

The research concept is explained by comparing its approach to knowledge building to the stages of bread-making. Students and teacher start with something formless which sticks to their fingers. A kind of mash. Gradually that mash becomes more and more firm. Then there is a point when it turns rubbery. A point where the student-teacher team feel it's time to stop kneading. They sense that the yeast has done its work. The dough is alive. Then all the have to do is let it rest. Questions are answered. Problems are solved. Concerns are resolved.

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The fact is, once the learning team finds the proper sequence, the power to design coherent things follow from it almost automatically, and they are able to make a beautiful and whole design without any trouble. If the sequence is correctly followed, the student-teacher team can build a beautiful whole, almost without trying, because it is the nature of the mind to do so. The research concept provides the proper sequence. New knowledge is realized. Learning is accomplished.

The approach to teaching and learning outlined here, visualizes each educational lesson as a loosely defined miniature "research process." Adjustments are made regarding the research lead, to accommodate the particular learning exercise.

The Interdisciplinary Research Concept or developmental process offered here, is not for learning research. The teacher of research is concerned primarily with the "nuts and bolts" of the research process: hypothesis, statement of the problem, experimentation, variables, and all the rest.

But the emphasis of the research concept to teach and learn, is teaching and learning content, not on the research skills themselves. Emphasis is on thinking and learning. Although, research skills, as such, are likely to improve with the process. In this light, the research concept is a way to clear and logical communication. Communication between teacher and learner. It is a process in which thinking -- the organization, evaluation, and syntheses of knowledge -- is essential. The teacher using the approach is concerned with the quality of thinking and learning and the clarity with which ideas are understood.

Ideally, the research concept approach to teaching and learning is complimented by the approach to "mainstream" teaching in the classroom. The result of the two is synergistic -- the sum of the two parts working together is greater than either working alone.

The research concept to better teaching and to more effective learning are two sides of the same coin in the early college classroom. They are both important. The idea can be "a sobering new category of "learning and teaching literacy" for college students. It is a process that can be used as a powerful tool to improve learning and teaching in all areas.

College students can become ready to accept the challenge for high achievement and their place in today's complex society.

A Need

Our college students need a developmental model for an effective approach to comprehensive learning. And thinking. Institutions, need to include a learning model that helps young students see everyday classroom questions and other issues in a clearer light. One that provides for problem solvers loosely defined directions. Educators should provide a concept that is a problem solving approach for all areas of study. The concept *ought to have an interdisciplinary orientation.*

College students also need early exposure to a learning approach that supports the growth of future inventors and innovators, provides a process to a focal point of thinking, and helps them on to discoveries. The model should be "alive". Active. School systems need a concept that assists them to help students overcome obstruction to new and productive learning and on to critical and intellectual development. And, we must teach our students how to think and learn well. The interdisciplinary developmental approach to college student teaching and learning, meets these needs.

Interdisciplinary Research Concept as an Approach to Learning

Perhaps, we can invite ourselves to adjust our thinking in order to realize the wonder and fullness of the art of developmental, interdisciplinary organized problem solving -- as a means to increasing student knowledge. This may take a free and uninhibited mind -- a focal point of thinking.

Of all the influences that can shape the route to new knowledge, the research concept as a model or process, we believe, should top the list. Important lessons we can learn from research are the principles and mental skills that are that the process uses in seeking any new knowledge. The following illustrates the research problem solving model:

> μ <1> pose unanswered question, <2> gather valid information about the question, <3> consider all possible answers, <4> discuss and evaluate all aspects of possible answers, <5> select best possible answer or combination of answers, and <6> report the answers μ.
>
> The model serves as a guide only to: class and teacher as a team (group) applies plan for teaching and learning by cooperatively setting up criteria for evaluations and deliberations >>> establish key question (problem) to be resolved >>> totally accept free discussions, free wheeling and brain storming >>> relate experiences and situations from the group's world as reference points to provide indications about the concern >>> question both sides of issues >>> use points for comparison through not necessarily associated >>> accept unique and original contributions >>> evaluate points using valid reasoning and information >>> determine if additional information is needed to resolve concern >>> defer judgement, if necessary, until further study is completed >>> present conclusions in form of group reports, role playing, plays, analogies, writte reports, and in other ways as decided by the group

The research model is in itself, a teacher-student team approach to teaching, thinking, and learning. A state of mind.

An art of problem solving relationships. It is a process of proving and disproving beliefs and building and projecting the known.

The model follows workable steps to problem solving. It involves understanding and appreciating the concept of probing, synthesizing, concluding, discovering, and reporting. Its standard is one that can be readily used as an orderly learning practice later in any field of study. The approach offers clear stages of adding to what students already know. But it is mostly made up of insights and attitudes towards a learning process. One that provides a fascination with solving problems and searching for solutions. And one that sharpens students's expectations.

The Concept as a Total Learning Approach

The developmental, or interdisciplinary research concept approach to teaching and learning does not redefine existing concepts, but adds to approaches. It makes learning a full and complete process. That is, learning should not be restricted to college history, geography, math, the social sciences, or other sciences. Learning should include Black history, geography, math, the social sciences, and other sciences.

With the concept, college scholars are able to look at the "big picture." They can become aware early that it is possible to become users of general knowledge, not necessarily users of only Black History or English or Science. Problems more often than not span disciplines. The approach provides effective processes in thinking and learning, and opens new ways to knowledge.

The Concept as a Course of Study

The Research Concept as a Course of Study, visualizes the learning process as open, cooperative class contribution in building knowledge", and as an intellectual adventure of testing possibilities and of building on what students already know. With this in mind, one must further visualize students' group involvement in preparation through problem study while identifying learning difficulties that must be overcome to reach an answer.

The concept embraces chance in discovery. It embraces assumptions, imagination in productive thinking, and curiosity as an incentive to thinking. Included too, is discussion as a stimulus to the mind, to conditioned thinking, and, to cooperation and continuity.

Some Advantages of the Interdisciplinary research approach

The learning path provided by the approach, illustrates learning across fields of study. It argues against individualism. The language for a particular discipline may be unique but the route to increased knowledge does not make differences in the concept between, say, the humanities and the sciences.

As a developmental type process, the approach encourages reflective thinking by helping minds use organized thought to weighing and considering issues, and sometimes on to contradiction which often prove to be helpful. It offers a way to studying concerns critically, and with less confusion.

This knowledge pattern develops into an art that serves as a lifetime formula for learning new things. Not only is the approach an outlined and exciting learning tool, but one which bridges the gap between educational years and the future. The process provides a positive line of thought for all academic study. All of this results in students wanting to learn more and more and want to continue to learn. It also produces competence and lots of self-esteem.

The Concept and Teaching

The Concept permits teachers of college students to personalize thinking and learning. It permits them to use, the student - as - worker pattern, rather than the teacher - as - deliverer - of - knowledge strategy. The reason is, because the Research Concept usually involves individual learning steps. This in turn, permits students to unravel problems both on their own and collectively. Teachers also are able to give learning problems special attention.

The Concept in Use

The concept presents a feasible plan that can be implemented by an individual instructor, the faculty of a single department or college, or an entire college system. The model can serve as a teaching blue print for any curriculum area.

End Note

We can teach our young scholars to be creative. We can lead them on a trip that is a positive search for discovery. A trip that involves techniques which lets them probe their minds, stir their thoughts. A trip that allows them to redirect their patterns of thinking so that, like Archimedes, can shout, "I found it." They can learn to think. They can learn to learn well.

We can introduce to our students creating techniques -- such as extensive undirected discussions during class sessions. This permits them to exchange peer ideas and points of view long enough for the chaos of rambling thoughts to start clustering together and form a pattern that provides solutions, resolution of concerns, and answer particular questions. There can too, be a real bound between students and teachers.

LAPTOP AND DESKTOP COMPUTERS AS RESOURCES FOR ENHANCING THE WRITING SKILLS OF ADULT STUDENTS

Peter Balsamo and Pat Kuiken

Introduction

Research indicates that returning adult students enroll in the nation's colleges and universities with some very special needs. Spratt (1984) reports adults feel threatened by the classroom. Typically, their writing and math skills have languished. They often lack computer applications skills. They can be anxiety-ridden over entering a class of traditional age students. Their anxiety causes them to strive for good grades as proof of worthiness. This is made more difficult, and therefore stressful, because the typical adult student has a limited time available for educational pursuits due to job and family demands. Logically, the adult student is "at risk" in their studies and degree completion.

In order to fulfill its mission and to address the special needs of these adult learners, Radford University in Virginia, is committed to helping these students overcome any anxiety they have about entering and returning to higher education and to improve their learning skills, especially writing. Also, the university is seeking ways of making the educational process more flexible time-wise to accommodate the demands placed on adult students by family and job responsibilities. The focus of this paper is to describe how adult students can be assisted with their learning by teaching them to take advantage of simple and convenient computer applications, especially as these applications relate to writing skills.

Clearly, the association between computers and higher education is extraordinarily strong. What is, however, somewhat surprising is the almost nonexistent role that laptop or notebook computers are playing in this association, specifically as this association relates to the needs of adult students. At a time when university budgets are already strained by many demands and when the demands for more access to computers are steadily increasing, the laptop computer can be a solution to many problems. The relatively inexpensive laptop computer is very portable, and that allows all types of students to take

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computing power to their "study" sites. For adult students, such sites may be the classroom, a hotel room, traveling on a commuter train, at their desk during a lunch break, the library, keeping company in a sick child's room or while waiting for a child at basketball practice.

Moreover, the laptop computer can play a dual role: it can serve as a stand-alone computer that can be used for word processing, data management, telecommunications, and other functions; and it can serve as a peripheral device to desktop computers, allowing users to transfer data and text between laptop and more powerful computers. The point is, the adult student can create text documents anytime or any place with the laptop.

Need

In December 1986 Radford University was authorized to offer the Adult Degree Program. About 40 adult students were to be admitted during Fall 88 semester. The university, a comprehensive state institution with 8122 students, decided to begin implementation of the program earlier than planned. By the beginning of Spring 88 semester more than 50 adult learners had been admitted.

The Adult Degree Program, which leads to the Bachelor of General Studies degree, is designed to offer to adult students an academically sound alternative to traditionally structured baccalaureate programs. It recognizes the educational value of a variety of academic experiences and offers each student, with the guidance of a trained advisor, maximum opportunity to formulate an individualized course of study.

In earning credits towards the degree, a student may proceed at his or her own pace and draw upon non-traditional modes of instructional delivery such as correspondence study, portfolio assessment of demonstrated learning, CLEP exams, and directed study. The emphasis of the program is on the development and evaluation of the student's knowledge, not on the manner such knowledge is acquired.

Many students enrolled in the Adult Degree Program are considered as "at risk." They have difficulty beginning and completing myriad writing assignments. Even more difficult is finding quiet time to write and compose assignments amid job and family responsibilities. In most instances, these adult students don't have access to computer equipment or they don't know how to even operate a computer. In fact, many adult students are intimidated about operating a computer; they're "cyberphobic." By using simple laptop computers, most adult students could learn to do basic word processing in less than 30 minutes. Because it is portable, they have access to computing power whenever and wherever they want.

Students' needs for access to computers for word processing continuously outrace the ability of educational institutions to provide an adequate number of desktop computers or terminals for a mainframe. Using lightweight laptop computers, such as the Tandy 102, 200 or NEC Starlet, as a stand-alone machine and as a peripheral device to a limited number of desktop computers can be demonstrated as a cost effective and educationally sound alternative.

A major advantage of the laptop is its portability (i.e. less than five pounds) and easy-to-learn internal software packages (word processing, telecommunications, spreadsheet, BASIC, database management). Adult students using a laptop can write at a time and in a place most convenient to their needs. Writing on the laptop can be done with the usual word processing features: full-screen editing, word wrap, cut-and-paste, and text formatting.

The professional literature on the use of computers for word processing makes a clear and strong case for the efficacy of using computers to write and REVISE. Several authors have clearly outlined the psychic and physical advantages of word processing for students (Schwartz, 1982; Daiute, 1983 and 1985; Fisher, 1983; Feldman, 1984; Collier, 1983; Hoogestraat, 1986; Kirby, 1987). In a recent study by Milton Teichman (1986), it was found that students who use word processors like writing better than those who do not use the technology. The results were summarized as follows: 1) students were more willing to revise their work--both before and after it was submitted; 2) assignments were more likely to be turned in on time; 3) drafts brought to conference sessions were more complete; 4) class attendance increased; 5) students were proud to turn in "professional-looking" writing, which was easier to read; and 6) students appeared more serious and purposeful.

Teichman's study showed disadvantages that students found in using word processing related to frustrations caused by equipment breakdown, limited access to the computers, confinement to one location on campus for writing, not enough evening hours for the computer lab, and difficulty in learning the word processing package. No mention was ever made in the study about the applications and possible advantages of using laptop computers for either traditional students or mature adult learners. Students using laptop computers would not face the frustrations experienced by the students in the Teichman study. Portability of the laptops is a major advantage--students can write at a time and place most convenient to their needs. Limited time and consistent convenience are major components in the learning strategies for adult students. By using laptops in conjunction with powerful desktop computers, adult students save time and find convenience in educational pursuits.

Laptop computers represent a logical extension of the personal computer. As the desktop computer enhances a person's efficiency and effectiveness, it becomes desirable to continue that enhanced efficiency in places where the larger desktops cannot go.

This is where the laptops really shine. Portable and unobtrusive, they can be used on planes, in libraries, hotel rooms, at lectures and performances, in harsh field conditions. All that is needed is a convenient way to transfer to the more powerful desktop computer these drafts of correspondence, term papers, proposals, research articles, records of interviews and data gathered on site (Ross, 1984; Silagi, 1986; Haller, 1986; Lewis, 1986).

For example, an adult student can easily learn how to transfer text files from the laptop into a desktop computer using Q-MODEM communications software. Text is quickly transferred at 9600 baud. The text can then be inserted into the WORDPERFECT package, a top line corporate word processing package. Once in this package, students can use powerful editing tools such as spell checkers, thesaurus dictionaries, and grammar/style checkers. Moreover, they can combine a number of smaller text files into a single file that will permit them to move directly from field notes and rough sketches to well-organized, thoughtful drafts and final versions of reports and papers. Another possibility is creating documents in the laptop, uploading to the desktop for advanced processing and "cleaning," and then sending the document via modem to a desktop publishing system.

Activities

About three months before each semester begins, 10 adult students in the Adult Degree Program will be contacted and offered the use of a university-owned Tandy 200 computer with modem and phone cable for telecommunications. A staff member will instruct the selected students in the use of the equipment.

A desktop computer with 20 MB drive, modem and printer will be housed in an accessible location with evening and weekend times available. At their convenience, students connect the laptop to the desktop computer and transfer files written for class assignments. Once the files are uploaded, students can use spelling checkers, thesaurus dictionaries and grammar/style checkers in the desktop. In addition, students will use the laptop to communicate with the bulletin board system on the desktop at selected times of the days for electronic mail. The BBS will be managed by a staff member in the continuing education office. In addition, the desktop could be used for specialized software such as idea generation programs. The emphasis, however, of the laptop and desktop computers will be the enhancement and improvement of writing skills.

The university has made a commitment to exploring the educational applications of laptop computers. During Spring 1986 semester, a faculty development project was conducted for ten faculty members concerning the instructional applications of the laptop computer. At the conclusion of the project, the university obtained 10 Tandy 200 laptop computers for students to use for word processing. The students who used the laptops have been enthusiastic since they have access to word processing capabilities 24 hours a day, seven days a week. One problem, of course, has been limited access to desktop computers for uploading of text files for advanced processing.

Project Outcomes

Adult students participating in this program will gain several personal advantages. Progress towards achieving outcomes will be continually evaluated by consistent contact and feedback with the participating students. There will be at least three evaluation focus group sessions with the students during each semester. Data will be collected to determine the extent the proposed outcomes have been achieved. The expected outcomes are as follows:

1. They will become comfortable using laptop and desktop computers. The students will be more motivated about learning since these computer applications facilitate the completion of numerous writing assignments. They will realize that by using these computers they save time and their motivation for learning will be enhanced.

2. The use of the laptop computers in conjunction with the desktop will facilitate learning and improve writing skills for these adults. Their postsecondary education will thereby be made more meaningful, and the likelihood is that retention and completion rates will be improved.

3. The students' skills with the laptop and desktop computers could be immediately applied to their work situation.

4. The students will learn the applications of computer telecommunications. Such knowledge can increase motivation for learning and job enhancement possibilities.

Computers can be employed as teaching machines, as learning tools, and as learning resources to access information (Heerman, 1986). While computer-assisted instruction is commonly understood and available, the development of computers as learning tools and learning resources is a newer concept and not as widely applied in the postsecondary education of adult learners. Yet, computers can:

> make information readily available and increase the efficiency of adult learners in learning, controlling and organizing information. . . Research consistently documents the preferences adult learners have for planning their own learning projects, with defining content, controlling pace, and establishing style being particularly important (Heerman, 1986, pp. 97-98).

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TEACHING WRITING SKILLS TO THE ADULT STUDENT

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Adult students, also known as non-traditional aged students, mature students, older than average students or sometimes those aggravating students, have been returning to colleges and universities in increasing numbers over the past few decades. Yet many conscientious and thoughtful instructors in all disciplines have attempted to minimize the growing older student body and have continued to use the same teaching methodology they have always used. The educational needs of older adults, however, are sufficiently varied and different to warrant different modes of instruction. One area these conscientious instructors frequently are reluctant to address is the writing needs of adult students, perhaps in the belief that adults must possess adequate, if not accomplished writing skills because they have been survivors in the business world. Obvious grammatical errors are overlooked or apologized for because the instructor is certain that the adult knows the correct rules but has just perhaps been careless. In some cases writing deficiences by the adult are simply not addressed because younger instructors feel uncomfortable with confronting an older student, particularly one who is already successful in his profession. In fact, however, mature students have perhaps a greater and yet different set of writing needs than their traditional aged counterparts.

Adult students who have years of work experience also have had years to acquire the writing format of the business environment which is filled with jargon, acronyms, and artificial conventions inherited from generations of business writers never formally introduced to better writing formats. Their writing contains shortcuts, such as omitting the articles "the" or "a." Their letters contain archaic phrases such as "per your request" or "pursuant to." The business world has used these phrases and techniques presumably in an effort to save time and space, but at the same time there appears to be a passion for adding suffixes to words, such as "prioritization" or "organizationalized." Phrases are often jammed together until they are incoherent. It is as if the business world were afraid of a simple little preposition like "of." Much of the writing in the business world that passes for technical writing is little more than gobbledygook, such

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as "systematized incremental programming." Consequently, the adult student's writing style is stiff, formal, artificial, and aimed at trying to impress the reader rather than simply express the communication. Without even realizing it, their writing is as archaic as gray hair, but without the patina of historical charm.

Another problem that adult students have in writing in an academic environment is the fearsome "research paper." Adults frequently cannot recognize that the process of research, whether in the business world or in the academic library, is the same. Since the formats demonstrating the results of research are different in the business world, adults have difficulty making the transition from a business proposal to a research paper requiring citations. The vague and various formats seen in the business world do not lend themselves to conventional research formats. Adults are, therefore, awed by the process of citation and vaguely remember the mysterious thing called a "footnote" that used to go at the end of a page. They have difficulty understanding the importance of using quotation marks to identify directly quoted material from paraphrasing, and for that matter, they have little tolerance for the conventions with which academicians communicate, such as underlining journal titles instead of using quotation marks. Perhaps most obvious, however, is the inability of the adult student to sustain a lengthy writing project. Adult students most often write in one to two sentence paragraphs. Their thoughts are strung together like different colored and shaped beads, without transition and without direction. Much of their writing is narrative lists without introductions or conclusions, and to them the whole process of writing is like a foggy journey to the underworld.

To be fair to the adult, however, we must recognize the philosophy of teaching writing when they were maturing. More emphasis was put on spelling than style. We all remember having to rewrite a word ten times in the hope that our arm muscle would learn how to spell the word correctly. Then, of course, there was that funny dangling thing--the comma. Unfortunately for the majority of adults, they were taught that everytime you pause to take a breath, you put a comma into your written composition. Having been reared with this principle of speechmaking punctuation, the adult student finds it problematic to discover there really are finite rules for using commas, semicolons, and dashes that are either conspicuous in their writing products or non-existent.

A more insidious writing problem exists with the use of electronic writing software. Electronic technology has eliminated most spelling errors, but it has created a whole new spectrum of concerns. Adults tend to rely upon this technology as the final word in writing excellence. Technology is the new age, and rules of writing which have encouraged diligently written notes in margins by instructors are dismissed with the supremely confident statement, "Well, my PC won't do that." In large organizations where there is consistent communication between individuals via computers, all they are familiar with is the truncated forms of inter-office memos.

With all of these roadblocks confronting the instructor, how do we deal with the writing needs of mature students without attempting to overhaul the complete value system of the business world? How do we guide the mature student toward acquiring better writing skills without diminishing his effectiveness and acceptability in his business environment, and how do we encourage him to recognize that there are different writing styles for different audiences?

One way to assist the adult student is to show him how to modify the excessively formal writing style that occurs in the business environment. Since there are basically three audience levels (technical, semi-technical, and non-technical), have the adult student write instructions, such as directions to the nearest supermarket, for a nine-year old boy, a female secretary, and a middle-aged neighbor. Although this assignment may not fit evenly into the usually accepted three audience levels, it will produce an awareness of audience that subtly softens the abrupt formal style and focuses a more careful attention to word choice and diction. Another assignment that can accomplish the same goal is to have the mature student describe the procedure for mailing an express letter by the same group. Assignments that require some action or decision, such as giving instructions on how to put a parking sticker on a car or persuading the three different audiences to drink Diet Pepsi instead of Diet Coke, will not only polish their analytical style but also will have the secondary benefit of teaching them how to organize data and how to compare and contrast using the persuasive mode of writing.

These types of short assignments will aid in developing a more personal, conversational style of writing, and will help the student to learn to write in shorter and less convoluted sentences. However, learning to produce lengthy research projects is another issue. Since such research projects are frequently unsuccessful when first attempted by mature students, a first step toward an acceptance, if not a full understanding of bibliographic format, is to have them write abstracts of magazine articles. After several abstracts have been written, the mature student should be able to understand how to condense material as well as how to develop one paragraph of approximately 150 words instead of several short paragraphs. The next step is to have them write an annotated bibliography of these abstracts. This assignment will provide them experience in learning the correct method of bibliographical citations as well as how to condense a 150 word abstract into a 25-30 word annotation.

An additional benefit of this type of assignment is that it will illustrate the difference between paraphrasing and direct quotations. To further an understanding of the concept of direct, indirect quotations, plagiarism and citations, the mature student can then be asked to write a lengthy letter to the editor of the local newspaper protesting an issue in a recent editorial.

With these skills accomplished, a longer research topic can be assigned, but it is important to allow the student to select the topic, if possible. Besides the expansive knowledges and skills adults bring to any learning situation, they have particular interests and concerns in whatever course they are enrolled. The more flexibility we can allow these students to select their topic for research, the greater will be their chance of success. Whether the course is a required course or an elective, adult students approach a topic of their own choosing with more enthusiasm, and they are more receptive to advice about their writing abilities if the instructor maintains a positive viewpoint about the substantive material and gently coaches them about the common pitfalls of trite and unnatural expressions.

Of course, a constant problem for an adult is punctuation. If the rules of punctuation, which seem so perfectly clear to us, are a mud puddle for the traditional aged student, they are an ocean of quicksand for the adult. Since mature students seem to appreciate a "quick fix" approach, one method to explain the most common usages of punctuation is to use a formula approach. Why use labels such as independent and dependent clauses when many adults may have forgotten even what a clause is? It is more convenient in teaching a formula approach to use "C.S." for complete sentence and "I.S." for incomplete sentence. The following formula, therefore, can clarify most of the confusion concerning commas, semicolons and colons:

1.		conjunctions	
	C.S.,	and	C.S.
		or	
		nor	
		but	
		yet	
		so	

2.		adverbs	
	C.S.;	however	,C.S.
		therefore	
		although	
		nevertheless	

3. no conjunction or adverb

C.S. ; C.S.

4. C.S.: _____, _____, _____.

Although there are few absolutes concerning punctuation in the English language, these formulas listed above will cover most of the punctuation problems. In addition, it should be stated that there is one absolute in punctuation in American grammar: periods and commas are always inside the quotation marks and semicolons and colons are always outside the quotation marks ("."; ","; " "; " ":).

For the sake of our sanity and our guilt complexes, we should realize that if they have not learned the rules of punctuation by this time in their life, we are not going to make a true believer out of them now. The best we can hope for is to rectify some of their basic misconceptions. Just as we all must learn to crawl before we walk, the adults in our classes are at the crawling stage after years of formal scholastic inactivity.

Another useful method is to copy a page from a novel (one you have selected in this case), and using the formula technique, have them identify why each form of punctuation was used. Most often, with our traditional aged students, we give them an example of incorrect punctuation and ask them to correct it. The mature students have seen incorrect punctuation for years and have accepted that which is incorrect as correct. It is, therefore, more useful to show adults the correct form. If this is reasonably successful, then ask the mature students to analyze a page in a novel of their choice.

As mentioned earlier, one of the troublesome areas to change is the proliferation of words with multiple suffixes. The mature student may be aware of the foolishness of this practice, but the pressures within his daily work environment continue to reinforce this poor usage. In an effort to strengthen and focus that awareness, the student can select examples from his workplace (memos, directives, policy statements, announcements from the Personnel Department) and rewrite them for a nine-year old. If the adult student has difficulty locating such documents, we can probably find plenty of examples within our own institutions.

If all of the previously mentioned concerns are difficult, the problems of electronic software are an anxiety attack, and it may be a hard fought battle. We were once afraid that when words such as "nite" were used in the newspapers our standardized spelling conventions would be destroyed. Good taste prevailed then, but the force and popularity of the electronic media will not dissipate like the short-lived fads of the past. Instead we must join the movement and bring about change from within. Since mature students are often more knowledgeable about the electronic word than traditional aged students, they can become our change agents. They can develop floppy discs for duplication which can explain pagination, margins, headings, spacing and much more. Incidently, of course, they must learn these before they provide material to others.

All of the assignments suggested to help teach writing skills to mature students are short exercises which are easy to grade or discuss, and may be used in most disciplines. Traditional aged students know we do not expect them to have mastered all of the writing skills, but adults are afraid we expect too much of them. They are sensitive to criticism which implies that at their age they should have gained and retained certain writing skills. By using short, quick-to-grade exercises that use rather than ignore the mature student's work environment, we can address their writing needs, regardless of academic disciplines, without projecting the image of higher expectations. These types of assignments are as beneficial for the traditional aged student as they are for the mature student, but these exercises can capitalize on the vast resources of the adult, make the learning more meaningful and practical, and above all prove to the adult that it is never too late to learn.

AUTONOMY FOR UNDERGRADUATE WRITERS: HOW SELF-ASSESSMENT DE-MYSTIFIES WRITING

Larry B. Corse
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Supported by a grant from FIPSE and assisted by faculty from Alverno College, Clayton State College, a newly-designated senior institution in the University System of Georgia, has planned and is beginning to implement an outcome-focused, assessment-based general education program. One of the most important aspects of this program is the Communication Skills Outcome, which will build into the new CSC general education program a cross-curricular emphasis on writing, reading, speaking, and listening.

The first phase of this comprehensive communication program has been an intensively revised and expanded writing program. It is this writing program and its place in the overall structure and philosophy of our institution's approach to general education--and perhaps even more importantly its place in improving both students' skills in and attitudes toward written communication--which provide the foundation for the subject of this presentation. What this means is that before we can say much more about the relationships between student self-assessment and writing autonomy we need to establish some background, both in terms of some general language theory which has informed the development of our writing program and in terms of our college's particular strategies for developing assessment-based educational outcomes, in this case the Writing mode (as we call it) of the Communication Skills Outcome. Of necessity, each institution must chart its own course in developing such general education programs as a "writing across the curriculum" emphasis. We do not claim to be a model for your school. We simply wish to share the lessons we have learned and the successes we think we have achieved--where indeed we have achieved them.

Our new general education education curriculum has not been designed by the traditional discipline faculties; every new course has been designed by multi-discipline committees working with educational outcomes also developed by cross-discipline groups. The traditional English faculty did not determine the direction for the new writing program; it was the product of months of discussion by the entire college faculty, beginning with questioning the assumptions all of us had about writing, how we would define effective writing, and how we could best develop in our students the ability to write effectively.

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Out of these discussions came an important key to the success of our program--the criteria we use for evaluating writing. The same criteria are used in every discipline and in every course where writing takes place. Further, the criteria are not for the exclusive use of the faculty; they were designed so that students could learn to objectively evaluate their own work.

Our writing criteria are based on a theory of language that recognizes the social origin and contexts of language and its functions. This theoretical base and its pedagogical implications are responsible for encouraging and enabling faculty from other disciplines not usually associated with teaching writing to use writing as an important tool of instruction and to do so enthusiastically. More important, the emphasis the theory places on the contexts of a writing situation helps students to develop control over their own writing.

It is often easiest to define a concept by opposition, so it may be helpful to first explain an approach to writing we as a faculty rejected. The teaching of composition in this country has been dominated by a particular theory for at least the last century, a theory that we believe to be fundamentally wrong when applied to the teaching of writing. This approach does not have a name, and few probably would claim it, but it has been around for a long time. It is a theory based on a belief in and a search for an ideal. The theory is deeply rooted in the philosophical and theological traditions of western culture, and in theology, it may have its place, but the belief in a pre-existing ideal is insidious when applied to the teaching of writing. Yet, it is what English teachers have done for a long time. We have asked students to find the ideal essay in their thoughts and experiences, and then to reproduce that ideal on paper. Or even worse, we have allowed and encouraged students to search for an ideal way of writing that only the teacher knows and understands.

This theory places emphasis on students producing the ideal product that can be corrected by the superior instructor. In doing so, it encourages a belief in an absolute and correct way of writing, often leading us to spend endless hours teaching the rules of grammar, an endeavor that countless studies have shown does not result in a transfer to a student's being able to use appropriate grammar in his or her writing. What it usually does is cause the student to become so concerned about being correct that the student alters the final written product to avoid many grammatical situations altogether. So we often manage to train students to avoid words they can't spell and to steer away from complicated sentences, even though such practices restrict the students' thinking. Even worse, these practices severely limit students' responsibility for writing; they are encouraged to let the English instructor remain the keeper of the sacred mysteries of English. If you ever remember writing a paper you were pleased with and having that paper returned with mysterious red marks that revealed how you failed to "discover" the ideal model that your instructor knew was there--clear proof that it was there lay in the thorough editing and revision done by your instructor--if you have ever experienced this, you know what most students of English suffer and will do anything to avoid repeating. It is only human nature to avoid pain and humiliation.

This approach to teaching writing was not necessarily a problem for the elite and select students of our colleges in the first half of this century. These facile students (and their present day counterparts) intuitively knew how to think through an idea, with internal dialog, so that it seemed possible in fact to produce the ideal by appearing to find with ease the best way of conveying a message, of writing. But these students are not the majority of students in higher education today. And yet, in college after college, we continue, both teachers of writing and teachers of other disciplines, to believe in the ideal and continue to frighten students with it or to be frightened by it ourselves. Real people write to communicate, not to reproduce some ideal. We write to accomplish some purpose; we usually know why we are writing and in what contexts we work.

In the development of our criteria, we rejected this all too common approach based on the ideal. We turned instead to those who have studied the nature of language and its relationships to meaning. Our contextually-based criteria and the pedagogical approach that uses these criteria assume that meaning does not exist prior to language. For a concept, an idea, an action, an utterance to be understood and interpreted, it must become a concrete linguistic sign in the individual consciousness. Mikhail Bakhtin, tells us that the word is, in fact, the exclusive medium of consciousness. In the process of becoming a linguistic sign--a word or words in the individual consciousness--the concept, idea, action, etc. passes through and is surrounded by and is tied to other experiences of the individual. In other words, every thought of the individual is influenced by and altered by the individual psyche even as the thought is becoming a linguistic sign in the conscious mind. This leads to the obvious conclusion that all of us understand the world and our experiences in at least a slightly different way from everybody else. Meaning in this definition, therefore, does not exist outside and apart from the linguistic sign in the individual consciousness.

Another part of this theory is the concept that all language is dialogic. In other words, all language is formed in dialog and dialog implies a response. The individual consciousness is almost constantly awash with internal dialogs, and when we speak and write, we speak and write for reaction and response, either real or imagined. It therefore follows that all discourse is always shaped by audience--real, internal, or assumed. Gary Morson, in a discussion of Bakhtin, tells us that, because discourse is always shaped by audience, it is clear that the meaning attached to the linguistic sign is in fact a "bridge" between the individual consciousness and the audience. It is this concept that leads us to the idea that meaning of these linguistic signs is derived from social contexts--altered by the individual consciousness, but developed in a dialogic, social context.

From this theory of language comes an important pedagogical concept. Verbal processing of any idea is necessary for learning, understanding, and interpreting the idea. In other words, it is necessary for the individual student to take in the concept and bring it to the conscious mind as a linguistic sign, and in doing so, to work that concept through the dialogic, social contexts which will give the sign meaning.

Writing is a way of outwardly, verbally processing concepts; so too, of course, is speaking, engaging in discussion of concepts. In order to develop a clearer understanding of an idea, we think about it, we discuss it with others, or we write and revise and scribble and write some more. Unless an idea is simple and without any implications, it must be worked through in a discussion, either internally, or between ourselves and what we write, or with others in an outward social context in order for it to be fully developed and understood.

The first theory, the search for an ideal, places emphasis on a final product to be judged and evaluated; the second theory focuses on the process of creation, of thinking, of understanding --it focuses on the process of learning. Intervention in a process is possible; comment alone is possible with a final product. Remembering that meaning is the result of social constructs and contexts, intervention is necessary for the development of understanding and the creation of meaning. This is why in classes where the teaching of writing skills is the goal, writing should always be revisable, always in a state of process where others can intervene and engage the writer in a dialog to assist the writer in working through the ideas being written about. As students come to understand that their writing is not being produced so they can be judged against an ideal standard but rather that writing is essential to developing understandings of their world and their role in it, students seek to become responsible for their writing.

Many students have the idea that language is passive and that the college classroom is a place where they can sit and take in what is being said, then leave, educated. These students find it difficult to take responsibility for their writing and continue to rely on others, their instructors, to guide and direct their efforts to write; they fail to become autonomous. We need to bring students to see that using language is an active process in which they have a responsible part. If we can do this, we have a chance to help them obtain an education.

So our premise is that the autonomous writer is probably a more competent writer than the "other-directed" writer. How, then, do we foster autonomy in our struggling student-writers? You may notice the careful choice of the word foster. That word may be too comfortably complacent. All of us writing teachers would like to assume that we always do our best to "foster" our students' abilities to write, and that as we "foster" those abilities we are at the same time sending those students forth as fully independent thinkers and communicators, possessed of skills sufficient to adapt on their own to whatever writing problems the professional and public world may throw at them. Yet, how often do we wonder who is the more frightened by the prospect of cutting the umbilical cord of supervised writing instruction: our students or we ourselves? Less often, perhaps, are we willing to confront head-on the challenge of how not just to "foster" the development of a skill but to teach the skill, in this case the skill we are claiming comes with the student's cognizance of an important paradox: on the one hand, the knowledge that writing is inherently a social act; on the other hand, the existential recognition, as Sartre might put it, that a fully competent, choice-making writer is "condemned to be free." In other words, the skilled autonomous writer must come to realize that writing is for life--that it involves acquiring the ability to communicate successfully even after one has left the sometimes fussy attention of the Comp 101 instructor, that beleaguered soul who very well may feel that to surrender any powers to judge the worth of their writing to the students doing that writing is an invitation to linguistic chaos.

But since we must cut the cord sometime, the questions are not only when but how. This presentation considers the how. In short, if we desire our students to become autonomous, how do we foster--better yet, teach--that autonomy? Even though we will try to answer this question only with respect to writing, the implications are crucial to the entire academic enterprise--if indeed our ultimate goal is to "liberate" students into being self-motivating, independent thinkers and communicators.

How then to teach autonomy in writing? We propose four ways, and will try to elaborate at least upon some portions of these methods in the discussion to follow:

First, by definition, autonomous writers must know what it is they are independent at. Thus, an important first step is to define more comprehensively and self-searchingly what we mean by effective writing. Such an effort at defining our fundamental assumptions, as Georgine Loacker and her colleagues at Alverno College have shown in their pioneering work of recent years, not only pays us dividends in making us more aware of our own deepest commitments to our pedagogical specializations but also--in simple fairness--lets students know, rather than merely guess at, what the educated world expects of them, in this case effective writing.

Secondly, we have always had writing standards. We have not always had clearly defined standards, or standards that do not vary as unpredictably as professorial idiosyncrasies. Even when institutions have attempted to define writing standards, such standards may not always have been descriptive rather than prescriptive, attentive to process as well as to product, and sensitive to the learning needs of the apprentice as well as to the judgmental convenience of the examining masters.

Third, we have traditionally assumed that students write and that teachers assess. Especially now that we are beginning to recognize the great value of revision in the writing process we need to try to reverse the equation more often: i.e., teachers should not only look at student writing more from the writer's point of view, as Mina Shaughnessy suggested, but students must also get more practice at being assessors of writing: not just admirers of professional models enshrined in the standard composition anthology but good critical readers of the not-necessarily-anthologized writing of others and--perhaps even more importantly--of their own writing. Peter Elbow's profoundly provocative 1973 title "Writing Without Teachers" must be taken to mean that students need not so much to write apart from the noise of formalized instruction as to become their own teachers of writing, even as we wish them to become self-directing, self-motivating, independent learners in general.

Fourth, once we determine that autonomy can be taught, we must not blithely assume that our best or even our average students already possess basic learning skills when they reach college. One need not agree completely with William Perry's extension of Piaget's cognitive stages into the college-age years to know, or at least strongly suspect, that college students do need explicit guidance in moving from one level of cognitive maturity to a higher. Our hypothesis is that growth in autonomy parallels growth in cognitive development, which in turn parallels improvement in writing ability--especially the crucial indices of writing ability which are the confidence and the flexibility to respond effectively to varying types of writing situations (i.e., varying types of knowledge, purposes, readerships, or formatting or stylistic requirements). Thus, our emphasis in teaching writing needs more often to be an explicit emphasis on liberating students from an attitude that they are writing solely for an English class and for an English teacher, into an attitude that they are writing as intellectually independent individuals to other members of a larger diversified community (a community including, but not limited to, academia).

At Clayton State College, we have tried to address all four of the needs outlined above by developing a writing program based on the following interrelated features which had not formerly existed in the curriculum:

1. **A public, college-wide "definition" of writing.** According to the college's description of the Communication Outcome, as drawn up by an interdisciplinary Communication Outcome Council, writing shares with the other three emphasized modes of reading, speaking, and listening these features: "Communication, in its most comprehensive definition, is a process in which meaning is shared through the exchange of verbal or other signs. Skill in communication is the ability both

to use and to interpret these signs effectively, so as to bring about this shared understanding. As a desired outcome of the outcome-focused, assessment-based general education curriculum of Clayton State College, students who complete the prescribed general education requirement should possess skills for effective communication, as well as an ability to adapt those skills from one situation to another. These skills help people acquire new knowledge and perspectives, clarify existing knowledge, and share with others their perceptions, feelings, interpretations, and discoveries. The components of the Communication Outcome are (1) the ability to express meaning . . .; (2) the ability to comprehend meaning . . .; (3) the ability to understand the interrelationships among the elements of a communication situation . . .; (4) the ability to adapt one's communication skills from one situation to another." In specific connection with writing, "Students must demonstrate the ability to use writing skills and an understanding of the elements of communication to communicate effectively in the variety of situations, for the variety of purposes, and with the variety of reading audiences that graduates will encounter." (Communication Outcome Description, Clayton State College, Morrow GA, 1987, pp. 1-2)

2. **A set of college-wide writing criteria.** These criteria identify seven interdependent yet pedagogically separable domains common to writing of nearly all types, academic and otherwise. The Clayton State College Writing Criteria, in abbreviated form, are

   Criterion One -- Knowledge of the Subject: This criterion describes the accuracy, extensiveness, and perspective of the knowledge which the writer exhibits. This criterion also assesses the degree to which the writer's information meets the content requirements of a specific assignment.

   Criterion Two -- Awareness of Reader: This criterion concerns the writer's awareness of a known, assumed, or likely reading audience. In demonstrating this awareness, the writer must accommodate the reader's attitudes toward or familiarity with the subject, as well as the reader's comprehension level. Depending on the characteristics of the intended or likely readership, the writer's development, diction, and emphasis will vary and will reflect the degree to which the writer has identified and is addressing those readers.

   Criterion Three -- Organization Appropriate to the Purpose and to the Interaction between Writer and Reader: This criterion considers the structure and the coherence of the presentation. Structure refers to the way the writer achieves unity by focusing and ordering the paragraphs or sections of the material. Coherence refers to the way the writer connects the ideas to provide continuity from point to point throughout the text. These aspects of organization might vary according to the intended readership and purpose for writing.

Criterion Four -- Format: This criterion concerns the writer's use of a written or printed format appropriate to the writing situation. Format may include spelling, capitalization, footnoting/bibliography forms, or any other elements of typography or appearance.

Criterion Five -- Punctuation to Establish and Clarify Meaning: This criterion considers the writer's use of punctuation marks as a means of establishing, clarifying, and reinforcing the meaning of the sentences. All aspects of punctuation are included here, ranging from misuse and omission to more sophisticated uses which exhibit the writer's command of punctuation to convey meaning.

Criterion Six -- Sentence Structure to Establish and Clarify Meaning: This criterion describes the writer's control of the elements of sentence construction to establish, clarify, and reinforce the meaning of the sentences. Concerns here include the writer's use not only of appropriate conventions of grammar and usage (e.g., subject-verb agreement) but also of sentence patterns to establish relationships among ideas (e.g., coordination, subordination, parallelism).

Criterion Seven -- Style: This criterion focuses partly on the writer's personal stance or voice as a communicator, which includes tone, point of view, attitude, or personality. It also assesses the originality of the overall presentation, including the writer's ability to control the elements of writing to please, convince, or otherwise affect the reader.

3. With regard to standards, **performance ratings, with descriptors of various levels of accomplishment.** Each criterion also includes four performance rating descriptors, with the general headings Outstanding, Effective, Minimal, and Ineffective. Each of these descriptors is further subdivided into "high / low" sub-ratings, thus creating an eight-point performance rating scale. For example, under Criterion Seven--Style, the performance descriptors read as follows:

OUTSTANDING (8) (7): The writer's tone or general control of language consistently reflects a confident or authoritative central "voice" or "personality." Word choice is consistently precise, varied, economical, or inventive. The writing clearly shows stylistic talent.

EFFECTIVE (6) (5): The writer's tone or control of language generally reflects a confident or authoritative central "voice" or "personality." Word choice is generally precise, varied, economical, or inventive. The writing exhibits some success at style.

MINIMAL (4) (3): A central "voice" or "personality" is evident, though inconsistent in minor ways. Word choice is occasionally precise, varied, economical, or inventive. Stylistic awkwardness may be evident, but is not seriously distracting.

INEFFECTIVE (2) (1): The writer's tone or general control of language is so lacking in consistency that little central "voice" or "personality" is evident. Word choice generally lacks precision, variety, economy, or inventiveness. Severe stylistic awkwardness is evident.

As the necessarily abbreviated summaries of the Clayton State College Communication Outcome Description and the Writing Criteria with their accompanying performance rating descriptors given above may reflect, the possibilities for enhancing students' autonomy as writing instructors unto themselves fall into one or more of the following categories:

1. Effective writing is defined as including deliberate choice-making in adapting strategically to varying demands in a variety of writing situations, emphasizing not only academic writing assignments but types of writing situations which students may realistically expect to encounter after the completion of their formal education.

2. College-wide criteria can be devised which use terminology accessible to both students and faculty, and which do not rely exclusively on the jargon of the English composition class. The criteria may be applied in assessing nearly any type of writing, not just student essays. (Note that the criteria consistently refer to "the writer" rather than to "the student.")

3. Performance descriptors attempt to provide some means of evaluation which on the one hand force assessors away from purely subjective idiosyncrasy but which on the other hand allow some flexibility of interpretation to permit assessment of the writing sample (even in such domains as sentence structure and punctuation) in light of a particular rhetorical context. This approach, we believe, puts students and faculty on somewhat more level ground in terms of offering legitimacy to a student's logically-conceived rhetorical approach, even though the instructor may have developed a different approach had the instructor been the writer.
4. Once both students and their faculty assessors share a

common and commonly-accessible set of publicly-stated criteria and performance rating descriptions, neither party _necessarily_ enjoys a position of privilege over the other. True enough, faculty will continue to bear responsibility for such public certifications as course grades and graduation standards. Still, however, there exists much room short of those final certifications for faculty to surrender some of their power of judgment to students--especially when doing so in effect forces those students to become more responsible for evaluating their own work, no longer simply in light of "English class" standards but increasingly in terms of published standards shared by the entire college community, standards which were originally designed to speak not in the jargon of the traditional English composition class but in a less discipline-specific, across-and-beyond-the-curriculum language.

5. Perhaps most important of all is the attempt on the part of these criteria and performance descriptors to de-mythologize not only the writing process but the conventions and choices negotiated through the informed uses of language. The "common sense" value of these criteria and performance descriptors may reside precisely in the attempt of the content and language of the criteria to be sufficiently neutral to validate a wide variety of contextually justifiable or appropriate styles, types of organization, and choices among conventions even of the most mechanical sort. Thus, easier than ever to de-bunk are myths ranging from what Joseph Williams refers to as the _bêtes_ _noires_ of punctuation and usage to the moribund "Five Paragraph Theme." When students begin to realize that the community writing criteria can be their advocates against unreasonably idiosyncratic evaluation and against mythic language standards, they may begin to realize at last they they _do_ have some control over many or most of the writing situations they may encounter, rather than feeling helpless before the red pen-wielding Guardians of the Shibboleth. With this new realization of a measure of control comes the existential condemnation to be free to make the choices without which writing is merely the scratching of pen on paper.

In these initial years of the new Clayton State College writing program, we have discovered that these ideals more than occasionally translate into reality. On the whole, student writing appears to be improving. Perhaps even more gratifyingly, however, even among struggling writers we see clear signs that students are taking their writing more seriously and are more clearly aware of their strengths and weaknesses, and thus have some better idea of what and how to improve. This clarity of writerly self-awareness is due in large measure to the fact that every CSC faculty member has had some training in using the Writing Criteria to assess student work, and the majority of those faculty continue to assess writing in the college's Writing Across the Curriculum requirement established in 1986--not only in assessing papers with the Writing Criteria but in devoting class and conference time to helping students understand the self-help value of the criteria, both in peer- and self-assessment.

These uses of the criteria to encourage autonomy are especially emphasized in our college's fledgling Writing Lab, the establishment of which was a direct outcome of the new college writing emphasis and revised composition course sequence. The Lab provides individualized help not only in the traditional writing lab areas of diagnosis and remediation of discrete skills but in the not-yet-so-common technique of self-assessment. Students who are enrolled in the Writing Lab for institutional credit have a large part of their grade based on the accuracy of their self-assessment on one or more papers. If the student's self-assessment ratings fall within an allowed rating point variation from a lab tutor's independent assessment of the paper, the student earns grade credit for this realization that his or her own assessment of the strengths and weaknesses of the writing coincides reasonably closely even with a professional assessor's evaluation. We--and students along with us--have also discovered the value of having students not only pick the appropriately-numbered performance ratings in evaluating their work but also jot down their reasons for the rating, in terms of the performance rating descriptions in question. This activity of urging students not only to evaluate their writing but to articulate their self-assessment in terms of shared community standards not only seems to work in improving students' writing (though, of course still with practice) but--more importantly--in beginning to cut through the fog of helpless other-directedness which has impeded students all along from being not only better writers but better students in general.

While the Clayton State College outcome-focused, assessment-based general education curriculum is still under construction, we would be happy to share further details about the curriculum--and particularly the Communication Outcomes in writing, reading, speaking, and listening--with you. We are equally interested in any advice or counsel you may be able to provide us in the areas of communication across the curriculum, communication labs, and strategies for teaching students how to be autonomous writers through self-assessment or any other means. We are encouraged by our efforts so far, but we are perhaps all the more aware of the challenges that still lie ahead for all of us.

TEACHING ACROSS THE CURRICULUM: A VALUE-ADDED LEARNING EXPERIENCE

by Thomas L. Millard

In the current climate of declining student enrollments, shrinking educational resources, and the futuristic rush to embrace high technology, which is reshaping society, colleges and universities are facing a host of new challenges in the post-industrial era.

In a manner of speaking, the future is in the educated minds of today's students, and how well institutions of higher learning heed the call for curricular reform with innovative, timely and promising programs having tangible educational outcomes will these measures affirm the symbiosis between academia and the social, political, and economic system.

One simple, but irrefutable fact is we live in a world of change, and in this context, must plan and act on the basis of change--change that is on-going, constant, and unpredictable; change that is both cyclical and structural, fluctuating in size, direction, or in rate of development.

The point is, that given this scenario, if America's institutions of higher learning are to survive and remain viable in the next century, they will need to reevaluate their mission statement, and curricula, because educational planning must reflect an abiding concern for supply and demand in current and future work requirements. Curricula reflecting strategic planning of this nature represents the best defense against the fickleness of change in a transforming society.

Maximizing Instructural Resources

From a pedagogical perspective, meeting demands of students in an evolving society, in terms of instructional quality and product quality will be with some difficulty, given budgetary constraints and academic pressures on faculty. But these are challenges common to higher education throughout its history and even more so in recent times.

In any event, our task, like change, which is on-going and constant, is to create a ripple of influence that will be felt in the lives of students years after graduation.

The bottom line, of course, is the degree to which teaching-learning outcomes have tangible results, are responsive to the goals, capabilities, background and priorities of each student, and to the skills required for an economy shifting away from the old "smoke-stack" industries, and toward service and "information-based" industries.

But, we should be reminded that the historic purpose of higher education is the obligation to provide opportunities for global and unitary experiences out of which emerges the truly educated person who is comfortable in his/her existence, who understands (at least to a reasonable degree) the physical world, the social envirnoment, and the moral forces that shape and

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influence us all in a complete way; and who has the skills to evaluate the meaning of his/her world, even to the extent of visualizing how existing conditions can be improved for the better.

As these possibilities illustrate, the truly educated person is cognitively organized to use knowledge already possessed, and use that knowledge, in conjunction with new knowledge, to generalize, draw comparisons, sort out logical fallacies in arguments, and formulate reasoned positions on social or ethical issues, thus facing the future with confidence and excitement.

Prologue

This paper is a descriptive report on the author's efforts in mediating some of the issues/needs addressed herein. The "Project" entailed student writing for publication. The pedagogical focus was to encourage students to identify alternatives to the traditional term paper or, to be more specific, teacher-sponsored topic writing assignments, and to offer support while students act on what we perceive to be a unique growth-promoting opportunity.

We tried (although we are not certain, we always succeeded) to focus student attention on their life/professional experiences, and the organization of thought behavior and ideas as coherent themes. We sought to foster in students analysis of their own thinking for understanding and appreciating creative processes of reasoning for examining those values and principles important to the quality of life.

Three basic ideas guided our efforts. First, and foremost, the idea that the student is motivated to learn. Second, learning is viewed comprehensively, since understanding and the integration of new information into one's beliefs system is inclusive.

Third, learning experiences are oriented towards both cognitive and affective learning needs. Such an orientation enhances the relevancy of the learning and serves to develop the learner in a wholistic manner.

The project had its genesis with acceptance of the notion that faculty must change the way it approaches the learning process. In considering what and where to change, we looked at our years of experience with teacher-sponsored topic writing assignments, and the intended learning results. We concluded, product quality of traditional term papers to be less than satisfactory.

Whether the explanation for unsatisfactory quality can be attributed to student perception of teacher-mandated writing assignments as "busy work," intellectually unredeeming or institutional requirements long bereft of purpose is difficult to assess, in the absence of systematic study. This fact not withstanding, we concluded that improving the product quality of written work was an essential educational priority.

Because the written expression of ideas and the critical thinking skills associated with writing are fundamental to all disciplines, every student should be competent in writing clear, coherent prose. And since an information society demands proficiency in writing, encouraging student writing for publication was like breathing fresh life into the teaching process generating, we believe, a revitalized quest for learning.

The bottom line was not so much the facilitation of conditions for stimulating educational renewal, as was our focus on encouraging student writings for publication, within the framework of course requirements. Admittedly, this approach was an implicit criticism of traditional teacher-mandated term papers, a form of learning activity, some researchers would describe as passive learning with questionable learning outcomes.

The educational goals were simple and straightforward. We sought to promote intellectual abilities by setting high expectations in performance. These were not in our estimation unrealistic expectations, but expectations slightly above the students' current abilities. We were convinced that people tend to live up to the demands placed on them. And finally, the approach was thought-focused because we deemed it essential that students, across the disciplines, develop the thinking and writing skills essential for dealing with the complex and challenging problems in their future work situation.

The importance of writing competency cannot be overstated. Studies have shown that individuals with writing skills are often the best students and the most successful professionals. Sadly, most people have no idea that their lack of writing proficiency is holding them back.

In order to accomplish our task, we needed a rationale enabling students to perceive rewards from self-directed cognitive experiences that they could value, and integrate into their future occupational skills. This level of performance we believed would trigger internal motivation for increased learning across the curriculum.

We found a rationale in the fusing of career and academic training. We rationalized that the prerequisite cognitive capacity for developing Writing Skills could be achieved if we linked such efforts to the idea that 1) contributing to the literature from which one has received his/her academic training is a professional obligation and responsibility, and 2) since every academically trained person should at some point in their career have something important to report evolving from their professional/occupational experiences, cultivation of this attitude and the development of writing skills should be a teaching goal in graduate school.

Lack of Writing Skills Impacts on Discipline

Whatever field of endeavor students are preparing for--commerce or industry, science or the arts, philosophy or education or government and statesmanship, investment of resources in fostering writing skills, exposing them to the challenging business of doing scholarly work, and promoting critical reasoning skills constitutes the highest priority task, as we prepare for the 21st century, only 14 years away.

Such a commitment is the only or at least the best way to pass on scholarly traditions, promote creativity, and guarantee not just professional development but the very future of the discipline.

In our judgment, this is the most fundamental intellectual legacy we can give to our students.

For indeed, no discipline, be it medicine, law or accounting, can hope to retain its stature, prestige and credibility, in the absence of insightful and timely information that keeps close to the realities of the field.

If students are deficient in writing skills, they will be singularly handicapped in discharging their indebtedness and obligation to their discipline.

It has been said many times that we use but a small percentage of our potential. Less than 25%. I am reminded of William James who said that human beings live too far within self-imposed limits.

Our project was designed to help students use that untapped 75% so that they can discover and fulfill their potentials.

Writing for Publication as an Option

The program was successful, in part, because it was made clear to the students that writing papers for publication was an option. We frankly acknowledged with no disrespect to the class the realization that probably most of them lack the requisite skills for publication. We insisted, however, they were capable of writing good, short and simple declarative sentences expressing an idea. And it was this potential that was to be exploited with creative and imaginative thinking. Originality was stressed as a demonstration of the individual's capacity to think through ideas and conceptualize them in a meaningful frame of reference. In orienting the students to the assignment, they were cautioned, serious writing is always preceded by a search of the extant literature to discover if what one has to say is truly a contribution to the literature. Since the object of written work is to inform, we stress students should know what others before them have said about the same subject. To ignore past contributions, we admonished, is to impair the scholarship of their efforts. Lesson-wise, the students were told when a person says, "I know what I mean, but can't express it," the individual most likely does not know what he/she means. The individual still has some thinking to do. As the individual begins to pull his/her thoughts together, especially by learning to write in short, simple declarative sentences, the person will clarify his/her own ideas and for some individuals, this is an excellent method for developing understanding of subject organization.

We made clear in the orientation, which was usually the initial class meeting, our strong belief that the acquisition of attitudes and understanding of the importance of writing proficiency cannot be left to chance. We further believed that in the future employment, their written work will be judged primarily on its contents, that is, on the value or quality of the information and ideas it expresses; that careful organization and clear, concise expression of content would be essential if the intended reader is to grasp the full meaning. Thus, the mental processes on which written expressions of ideas depend were reviewed. These included: 1) Generalizations: pulling together the common elements that relate specific examples, ideas or instances to one another; 2) Inferences: extracting the meanings that are implied but not stated explicitly; reading between the lines; 3) Analysis: examining parts of the whole, such as causes, effects and processes; 4) Synthesis: developing ideas into new relationships or contexts: creating, organizing the parts as in a puzzle; 5) Evaluation: making judgments according to a criterion: is it concise, readable, organized. Our message to students emphasized that in order to be marketable and successful in today's world, they will need to experience, if only from a market-centered perspective, the rigors of serious writing. This means: 1) developing the capacity to apply to new context the knowledge gained from classroom learning, readings, life experiences and library research; 2) developing the ability to draw conclusions, as opposed to simply restating or summarizing the works of others; 3) being able to state a thesis clearly and support same with reasoning and evidence; 4) being able to organize the parts of a paper in an orderly sequence, governed by a controlling purpose that is clear to the writer, with paragraphs and subsections containing their own internal organization; and 5) being able to adapt what one writes to the needs and expectations of the intended audience, whether it is one's peers, other scholars in one's discipline, or the general public.

Angle of Approach

At the outset, we recognized students will have various needs and abilities regarding these assignments: 1) those students who have the ability to write competently but who might need encouragement to write for publication; 2) those students who lack the intrinsic dirve and self-confidence and might therefore require some market-force persuasion, reassurance and ego support; and 3) those students who for a variety of reasons would opt for the traditional term paper requirement. We were convinced, therefore, that students would need to be inspired, challenged or nudged into writing a mature and publishable paper with all the confidence that makes it possible. As an aside, I would point out that published papers as learning outcomes are significant indices of teaching effectiveness. This was an explicit goal.

With respect to students' probable reaction, we anticipated initial resistance if not outright dismissal of the challenge to compose articles for professional journals. Our strategy in minimizing or disarming their arguments took the following approach, which proved to be effective.

1. Students were initially oriented on their soon-to-be professional status with all the "rights, privileges and immunities thereunto appertaining," including the obligation we argued in contributing to the literature of their respective discipline. It was made clear that this is a responsibility all members of a profession assume: that only as the existing body of knowledge undergoes constant review and revision, as new ideas and experience emerge from practice, can the discipline maintain its usefulness, relevancy and credibility.

2. The advantages and benefits of serious writing were discussed in great detail. We noted, for example, the immense pride in seeing one's paper published in important journals alongside those of well-known scholars; the prestige and status accruing therefrom; its value factor in enhancing one's resume; the demonstration of one's ability to pursue doctoral studies. (Several of my writer-students have gone on to earn doctorates.) Lastly, we stressed the equally serious commitment to writing as a significant measure or component of professional leadership. Publication of one's views, we observed, demonstrates ability to articulate issues, which is an important index of leadership.

3. For the timid, unsure student, our strategy involved encouraging them to "test the waters" by writing an "op-ed" piece, a short newspaper article or letter to the editor of their local newspaper or to a news journal (e.g., *Time*, *Newsweek*, *U.S. News and World Report*) in response to a news article. This approach had a two-fold purpose: 1) as a result of their "article," the student should feel more self-confidence, more comfortable with the ensuing demands of a larger, more complex paper, and better able to cope with the rigors of serious writing; and 2) the student would be encouraged to use the published statement as the basis for a more developed paper with the usual references, footnotes and bibliography. It should be noted, several students have found this prescription helpful as a starter, perhaps, because it enabled them to sharpen their understanding of short, concise articles that communicate ideas. As a tool it was most effective.

4. Since lectures are the predominant method of instruction, and it is generally recognized that the educational yield from lectures is generally low, we sought to increase the yield by granting students a wide latitude in topic selection, including topics indirectly related to course content. Factors such as students' age, maturity, years of experience, discipline (my students represent a variety of fields, e.g., teaching, health profession, business and social welfare) and topic interest had to be considered, giving the heterogeneous makeup of the class and the unusual requirements imposed on them. In general, we sought to strike a dynamically important note of inquisitiveness by calling to students' attention (especially those with years of professional experience) the yet unsolved problems and issues in their field and encourage them to re-examine the fundamental tenets of his/her discipline.

In this connection, the clinical value of this approach was that it made more palpable our assertion that as professionals already toiling in the "vineyards," there is much they can harvest in conceptual and theoretical questions culled from "hands-on" experiences. This strategy also helped to facilitate the breakdown of powerful anxieties and/or frozen attitudes. More importantly, it helped to persuade those students wavering in their choice between a term paper or a more substantial paper for publication. As a further inducement and source of support, we establish a working relationship with the college workshop, a remedial program sponsored by the English Department for assisting students with their writing problems.

Essay-Type Articles Stressed

The students were instructed to write essays and not research-focused papers, the requirements of which we considered too time-consuming and perhaps outside the individual's level of experience. They were advised to examine the college library's holding of journals and periodicals and select a journal they felt comfortable with for submission of their manuscript. They were further instructed to comply with the journal's editorial requirement and not to follow the traditional term paper organization and style. We discussed protocol for submitting manuscripts, and the writer using his experience as a consulting editor to a journal, the juried/review process was explained as was the appropriate information for the cover letter. They were also forewarned of possible rejection and the psychological let-down ensuing therefrom. We spoke at great length assuring the class that the best of authors have experienced editorial rejection, and the writer candidly shared with them his experiences at failure. At the same time, we reminded the students that a rejection was not per se a failure but a lesson in writing, since it is a common practice for the editor to offer some comments or easons for the rejection. In some instances, we reminded the class, rewriting the paper with the editor's comments or suggestions in mind, and resubmitting it can often result in its acceptance.

Finally, the class was assured their paper would be graded on the same basis as a term paper. This statement was important lest those students opting for the traditional term paper perceive themselves in a disadvantaged position at grade time.

As an aside, whenever a student sought independent study, we found this an excellent opportunity to tout serious writing. While the student is allowed to fashion his/her own course of study, invariably we would convince the student that a paper of publishable quality should be an outcome of independent study.

Conclusion and Summary

The effort to raise graduate students' writing to the level of competency was in large part attributable to student motivation to learn. We simply created an environment that allowed self-directed learning to occur. Students were given the primary responsibility for setting learning goals and selecting their learning experiences.

The resulting choice of the students has clearly the character of professionalism as the evidential material suggests. Student papers have been published in such diverse journals as Adult Leadership, NAD Broadcaster, Journal of International Association of Pupil Personnel Worker, Today's Education, The Clearing House, Counseling and Values, The Guidance Clinic, EAP Digest, Cimmaron Review The Independent School Bulletin, Adult Education, Teacher Paper, N.J. School Board Notes, School Leader, NJEA Review, Journal of Business, Journal of Health Education, and Tempo (Journal of the New Jersey Music Educators Association).

It should be apparent from the above the correctness of the decision to permit a wide latitude in subject choice. Student evaluations at semester's end indicated a worthwhile educational experience. One unanticipated but welcome outcome was students' new-found respect for published articles.

Not only had these students learned to write proficiently, and in the process raise their self-confidence, but they also learned that to write is learning to think. And, perhaps, the most striking instance of success was the affirmation of students to continue writing for publication in other classes in lieu of traditional term papers. This was true even for those students whose papers were not accepted for publication. This unique teaching approach has the potential for a new model in student learning outcomes. As the results demonstrate, student publications, as a measure of cognitive learning experiences, are an attractive alternative to the traditional teacher-assigned term paper. One further thought needs to be shared. Obviously, a number of factors contributed to the success of the program. One that stands out is the following. Students find credibility in the writer's efforts, when they know that he has published. As a strategy, I would distribute copies of my articles as well as those published by former students. Each year, I would try to publish one or two articles so that my efforts would represent for students a model, a standard of sorts for much needed encouragement and support. Thus the students recognize I would not demand from them what I am not prepared to demand of myself. I am certain this has been an important factor in my success to date.

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